THE TIMES
Higher Education
SUPPLEMENT

Sheffield poly staff to lose jobs

by David Jobbins

Some Sheffield City Polytechnic staff are to lose their jobs as part of a package of compulsory redundancies.

For the first time, it was confirmed that redundancies are being discussed this week although how many was not immediately clear. The principal, the Rev Dr George Tolley, dismissed speculation that it was as many as 120. Of the £400,000 cut which is faced by the polytechnic, about £175,000 must come out of the staffing budget.

While some polytechnics are paring to the bone in other directions to avoid redundancies, Sheffield is set to grasp the nettle in an effort to strengthen their long-term future of the polytechnic.

Even those polytechnic directors who have elected to go for freezing of vacancies, early retirement, and voluntary redundancy acknowledge they may be storing up problems for the future.

Dr Tolley said: "Although we are facing a cut which is less in cash and proportion than other polytechnics, we are trying to do it with a longer term view.

"At this moment we are discussing compulsory redundancies for the first time. Compulsory redundancies are now on the table for negotiation.

"The short-term one-off cut is just a palliative. What we need to do is plan our courses and staffing for the longer term."

Meanwhile union leaders were expecting that North East London Polytechnic would be brought to a standstill when staff met to consider action against threatened redundancies there. The meeting was called by the polytechnic's joint union committee to protest at cuts of £3m phased over 1980-81 and 1981-82.

Staff fear up to 140 jobs may go in 1981-82, and Miss Jean Bocock, assistant secretary for higher education for the National Association of Teachers in Further and Higher Education, told them they should resist forcibly.

At Brighton Polytechnic, which faces a £750,000 cut equivalent to a loss of 4 per cent, it is admitted that it will be extremely difficult to make the savings required by East Sussex County Council without hitting staffing.

A thorough investigation of staffing levels is being carried out to make sure that a reduction in the size of the establishment will cause the least damage to the polytechnic's academic work.

NATFHE's executive is meeting this weekend to prepare a strategy to combat attempts to use premature retirement and similar schemes to avoid making proper redundancy declarations in accordance with the national agreement which requires one year's notice.

Funds plan 'height of madness'

There were mixed reactions to Government's new proposals to realise student union finances announced by Mr Mark Carlisle in the House of Commons this week.

Describing the announcement as the "height of madness" Mr Alec Sapner, general secretary of the Association of University Teachers said the union had already told the minister that such a scheme would "sow the seeds of destruction in each and every university".

There was already a free-for-all in the way in which unions were trying to act to distribute existing resources within an institution now the Government was withdrawing quite deliberately a totally familiar call on those resources.

The new arrangements, by which the academic year ended when unions will cease to be funded through the student awards system, Finance will cease instead from the university's main budget. The funds available to each union will be decided at institutional and authority level. The Government said its aim is to make public expenditure on student unions more accountable.

National Union of Students President Trevor Phillips was cautious. "It leaves a lot of room for negotiation to ensure there is no internal conflict between the unions and institutions", he said.

"Although it gives us a safeguard to student union finances beyond the year 1981-82, it gives the right of students to democratically decide how to spend their union funds."

The NUS is more concerned about the way this new proposal will operate than over the principle itself. The success or failure of the arrangement, it believes, will depend on whether the government learns from new machinery to give students a bigger say in how resources in the university are distributed.

"Equally, we do know that there will be any legal means to stop colleges trying to force students' unions into line by threatening to reduce drastically their funding", said Mr Phillips. The NUS is to hold early talks with representatives of university principals and employers's groups for these legal purposes.

"If they are not forthcoming we shall try to stop the proposals in Parliament", Mr Phillips said.

The Committee of Principals and Vice-Chancellors is to press for immediate talks with the University Grants Committee on the "serious and complex" issue of funding. "Our main concern is that there should be adequate funding to support the important work of students' unions", said a spokeswoman.

Trust provides cash for technical study centre

The Leverhulme Trust has agreed to provide £1,500,000 over five years to establish an Independent Centre for the Analysis of Technical Change (CATCH).

This follows discussions with the Social Science and Science Research Councils who have already approved this project and undertaken to support it for 10 years.

The new centre will produce analyses and suggest policies which will be independent of, but complementary to, those generated by government, industry and other interest groups. Emphasis will be given to policy issues related to the uses of resources, technological change and scientific development.

The chairman of the proposed organizing committee and the eventual governing board of the centre, will be Sir Michael Swann, chairman of the BBC and provost-elect of Oriel College, Oxford.

This governing board will consist of members from the three main sponsors, from both sides of industry and from government and academic science. The director of the centre, who has yet to be appointed, will also be on the board and will have a staff of two or three assistant directors responsible for the work of research teams.

Altogether there will be about 20 professional and 10 supporting staff. The majority of the professional staff will be on secondment or will have joint appointments with universities, government establishments or companies.

The two research councils have each agreed to contribute £525,000 over the first five years starting in 1980-81, building up over that period from £25,000 in the first year to £250,000 in 1984-85. Subject to a satisfactory review of the centre's programme after five years they will commit more money for a further five years at the level of £250,000 a year or £1,250,000 over the period as a whole.

Sir Michael Swann, chairman of the BBC and provost-elect of Oriel College, Oxford, heads the team setting up the centre.

Academics asked to back strike

The Sheffield branch of the Association of University Teachers is to discuss a motion calling for financial support for striking students.

An action group supporting the strike has written to all unions in Sheffield asking for help and the AUT committee has deferred a decision but referred it to a general meeting.

Although the AUT nationally is affiliated to the Trades Union Congress, it is unlikely that Sheffield members will agree to send a donation.

"The AUT is not a political union as such and our members cover the whole spectrum of the political parties," said Mr Gwyn Rowley, secretary of the branch. "As a committee we felt that we could not take this kind of decision although it is up to individuals to contribute if they wish to do so."

"I do not think that members will want to break away from their normal procedures in this instance. I think it would also require a two-thirds majority to make a payment of this type", he said.

Meanwhile all the colons on campus have been asked to support a call by the Sheffield Trades Council to back a one-day stoppage in the South Yorkshire area.

The stoppage in the region is part of a campaign against the public expenditure cuts. The local AUT, the Association of Scientific and Technical and Managerial Staffs and the National and Local Government Officers are all arranging meetings this week and next to discuss whether they should support the call.

The aim of the trades union movement is to "close down" the whole of South Yorkshire for one day, and they would want to include the university in this.

Attitudes are still undecided at the university as many regret the timing of the call because of the financial situation. But opinion may be sharpened, particularly among the non-academic unions, because of the University Grants Committee's recommendation that universities should cease to maintain nurseries from recurrent grants. Staff fear this would mean redundancies, and this would help to bring home the effect of the public spending cuts.

Drop in awards for overseas students

A drop of 30 per cent in the number of new awards to be made by the Overseas Development Administration for 1980-81, partly due to rises in overseas student fees, is forecast in a memorandum submitted to a select committee on foreign affairs—overseas development subcommittee this week.

This would mean that 3,000 fewer students than last year could be funded by the ODA whose estimated budget for 1980-81 has only risen from £22m to £24m. Of these 1,500 or more students would be directly affected by the rise in overseas student fees.

Mr William Dodd, chief education adviser, giving evidence for the ODA, said that it was making a study both of the effect of the fees rise on higher education institutions and the implications for its training aid programme, but no paper on the subject had been produced.

He added that it was very difficult to make contingency plans as it was not clear exactly what would happen and what the effects would be.

He pointed out that he had gauged some reaction to the increase during a recent visit to South East Asia. Some countries would continue sending their students to the United Kingdom as long as institutions provided the goods, but others would send students to Australia and New Zealand. Some thought that they would be forced to use cheaper shorter courses and others proposed to send their students more earlier so that they could benefit from local authority grants.

Pressed by MPs as to whether a study of the political implications the rise might have, had been made Mr Robert Alaszewski, under-secretary and principal finance officer admitted that there was such a paper but was reluctant to produce it for the committee without consultation.

Kirklees pushes poly takeover

Kirklees Council has cancelled out its threat to seek permission from Mr Mark Carlisle, Secretary of State for Education, to take over day-to-day running of Huddersfield Polytechnic for at least a year.

Talks to resolve the major row over alleged maladministration have foundered on governors' insistence that the rector, Mr Ken Durrands, should take part.

What was to have been the first formal meeting between the five governors given power to act, and another councillors, broke down after more than four hours of talks.

Mr Durrands left the meeting after 30 minutes and both sides held separate talks. Messengers carried their views from one group to the other. The talks finally failed when Mr Durrands rejoined his fellow governors and the councillors.

The allegations arise from an audit report by Kirklees' director of finance, Mr Peter Shacman. The five governors, including Mr Durrands, had been nominated to act over the issue by a special meeting on December 20. It was not until January 4 that Kirklees took a decision which would bar student and staff representatives, including Mr Durrands, from the talks.

The councillors, the leaders of the three party groups, and the deputy Tory and Labour leaders, are adamant that initial discussions cannot take place about criticisms of polytechnic staff when any member of that staff is present.

In a statement they said that they deeply regretted the breakdown and would continue to work for a constructive joint investigation of the allegations.

The councillors were also angered by a statement by the governors in the polytechnic's staff newsletter stating there were no grounds in the report to justify the suspension or dismissal of any staff.

They described this as "premature and ill advised."

"Questions of the nature and extent of possible disciplinary procedures cannot be resolved until all matters raised by the report have been examined in detail and conclusions reached."

Five days after the meeting the polytechnic was still unable to comment.

Fircroft tutors demand reinstatement

Four tutors who were made redundant after Fircroft adult residential college in Birmingham was closed in 1975 will not be reinstated when the college reopens this autumn.

The new governing body, which will shortly be advertising for tutorial staff following the appointment of a new principal, says that the question of reinstatement does not arise as the reopening of the college marks an entirely new beginning.

Fircroft was closed nearly five years ago following student unrest. A government inquiry subsequently recommended the dismissal of the former principal Tony Corfield and the four full-time tutors, who were made redundant.

Now the four tutors, backed by their union, the Association of Scientific, Technical and Managerial Staffs, have written to the chairman of the new governing body, the Reverend Paul Clifford, asking for their jobs back.

The four—former senior tutor Harry Newton, Trevor Blackwell, Bob Milsom and Terry Murphy—claim the college has a moral duty to reinstate them as teaching work will be available. They also feel that reinstatement will clear their names.

"The governors overreacted, closed the college and had to find scapegoats for their own ineffectiveness", said Trevor Blackwell.

"Our feeling is that that was very unfair and that it has left all four tutors under something of a cloud."

The chairman of the new governing body, Mr Clifford, says that the ex-tutors are welcome to apply for the three posts being advertised but there can be no question of reinstatement.

"The whole question of the dispute that led to the redundancies is nothing whatsoever to do with the governors."

The tutors' bid for reinstatement is being supported by the National Union of Students, the Society of Industrial Tutors and the Campaign for Academic Freedom as well as ASTMS.

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V-cs demand final say on courses

by John O'Leary

Universities would not necessarily cooperate with the Department of Education and Science in a "broad steer" of the subject balance in higher education, vice-chancellors told the Select Committee on Education this week.

The DES view was only one to be taken into consideration in course planning, Sir Alec Merrison, chairman of the Committee of Vice-Chancellors and Principals said. "We do not regard the DES as the fount and oracle of wisdom", said Sir Alec, adding that the universities would want to look closely at any proposals before deciding on their attitudes.

In a paper to the committee, the CVCP said that universities did not have the right to pursue their self-interest but should determine the national interest and act on it.

The vice-chancellors were also reluctant to indulge in social engineering to build up the proportion of working-class students. To depart from judgment based on applicants' performance to provide a different class bias would be to tread on dangerous ground.

University courses and even whole institutions are likely to begin to close next year as a direct result of the introduction of full-cost fees for overseas students, the vice-chancellors told MPs.

Sir Alec denied that universities were being alarmist about the effects of the new fees: "It is all very well to take the detached view but we have to deal with the corpse which is bleeding to death in front of our eyes", he said.

Some 15 courses are expected to close in October, 1981, at the University of Manchester Institute of Science and Technology and at Oxford University. An opinion survey has revealed that postgraduate numbers from abroad might fall by up to 40 per cent. The university is planning on the basis of a 20 per cent drop.

Polytechnic directors agreed that the impact of the fee increases would be quite enormous unless the same number of overseas students could be recruited, which was unlikely. The worst effects would probably be felt in London and in the north east.

The Committee of Directors of Polytechnics also put sweeping proposals for changes in the management of higher education. They advocated the replacement of local authority funding of polytechnics by the Department of Industry, the establishment of a national body to plan the whole of higher education and the granting of royal charters to enable some polytechnics to award their own degrees.

The submission by CDP also called into question the contributions of the colleges of higher education, which, it said, had no distinctive role and had diluted the polytechnics' well established regional role.

In their most revolutionary proposal the directors said: "The radical step should now be taken to remove from the polytechnics the parochial constraints which are a relic of distant practices and vested interests".

It was time to recognize the impossibility of local authorities either individually or collectively acting as arbiters of national needs for industry and commerce. It would seem logical, the directors said, for the Department of Industry to replace the local authority contribution joining in partnership with the DES so that national funding of polytechnics can be directed towards national purposes.

Officers of the Association of Principals of Colleges, who also gave evidence to the select committee, were sympathetic to the proposal in that it might provide desirable closer links with industry, although they thought their institutions might be keener to retain some local links.

The APC representatives also echoed the polytechnic directors' desire for national planning of higher education. The CDP said the "cupping of the pool" had underlined the need for a national body with academic credibility and knowledge of other fields to look at the whole range of courses and make judgements on their values. The University Grants Committee had no direct remit for overall planning of the university system and a body straddling the binary line was desirable.

UGC told to discuss funding

by Norman Crequer

The Select Committee on Education has asked the University Grants Committee to give further consideration to the idea of a national body which would fund both the universities and polytechnics.

There have been private talks between the two committees, on the subject since Dr Edward Parkes, chairman of the UGC said he would help to solve the problem of trying to advise on higher education when the UGC knew little of what was going on in the public sector.

Although the select committee is not necessarily canvassing the idea of a national funding body, and this is only one of a series of follow-up questions it has put to the UGC, there are many in the universities who think it will eventually come.

The universities would not generally object to a general planning advisory body but they would strenuously resist a "change that would mean they were instructed to follow certain courses."

In their interviews with the UGC the universities have been asked to say what their strengths and weaknesses are and, if the financial situation gets worse, which areas they most want to be protected.

Universities are now carrying out internal exercises to find ways of rationalising courses and departments in an attempt to save money. At Lancaster there is a department by department examination of costs and the question of possible amalgamations has been raised with staff.

At the University of Manchester Institute of Science and Technology a plan of cuts will be discussed by the Academic Board. This includes a suggestion that the number of demonstrators and part-time teaching assistants will be reduced by 20 per cent. Another recommendation is that the filling of appointments would be delayed for sixth months.

At Bristol, budgets for all departments have been cut by 10 per cent.

Two new posts have been created at The Times Higher Education Supplement. Robbie Vickers, formerly books editor of Nature, has joined The THES as science news editor. Olga Wojtas has become the paper's Scottish reporter. She will be based at the offices of The Times Educational Supplement Scotland at 56 Hanover Street, Edinburgh.

National redundancy rules considered

by David Jobbins

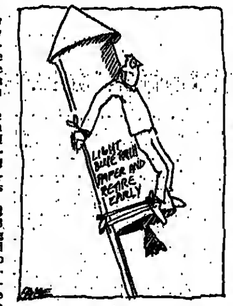
Negotiations to draw up a new national agreement covering early retirement and redundancies in colleges and polytechnics may be reopened after a three-year lapse following talks this week between union leaders and local education authority representatives.

The new initiative came from the National Association of Teachers in Further and Higher Education amid reports that several education authorities were drawing up individual early retirement schemes on attractive terms which in some cases could disguise redundancies.

Leicestershire has written to all its lecturers over the age of 53 offering them the chance of retiring early with the pension they would have expected at 60. The scheme is expected to be taken up by substantial numbers of staff at Leicester Polytechnic, which plans to save £200,000 by not replacing staff who leave.

Middlesex Polytechnic has introduced a similar scheme for staff aged over 50 in an effort to cope with a £1.4m cut in its spending plans. At the same time, several polytechnics are considering compulsory redundancies for teaching staff.

Leaders of the public sector lecturers' union are seeking urgent assurances from the local authority employers on cost-iron redundancy procedures.



They fear there may be "rogue" authorities who will not adhere strictly to the terms of the 1975 model redundancy agreement if lecturers' jobs have to be shed.

The issue was raised at the first meeting of the new National Joint Council for public sector lecturers. Mr Peter Dawson, general secretary of the National Association of Teachers in Further and Higher Education, called for urgent talks with the local authority associations on the developing situation.

Attention was drawn to lecturers' fears and suggestions of substantial redundancies in polytechnics and colleges.

Mr. Dawson also called on the local authority associations to confirm that existing agreements would be honoured.

"We wished to have their assistance in giving sound advice to authorities who might decide on wild courses of action under some pressure," he said after the meeting.

"The employers confirmed that where agreements have been reached, the national joint council would expect them to be kept".

He made clear that if existing agreements proved incapable of coping with the developing situation, the union would want to negotiate a better one through the new council.

Union leaders expect the main pressure on jobs at polytechnics to come in the 1981-82 financial year. Authorities will probably know within the next couple of months how much they will be allocated from the advanced further education pool for that year.

With staffing budgets under growing scrutiny, education authorities are increasingly turning to early retirement schemes to help cut spending.

Hertfordshire has refused to consider an early retirement scheme because it is too expensive, according to the director of Hatfield Polytechnic, Sir Norman Lindop.

City may have to sell college to meet cutback in cash

by Paul Flather

Liverpool City Council may be forced to merge or even sell one of its colleges of higher education as part of a package of measures to meet a £1,870,000 cutback on higher education.

College heads have been asked to examine "every means" in which money may be saved and the chairman of the city's education committee, Mr Sydney James, has called for detailed site values of a number of higher education colleges in the city.

Meanwhile, councillors, education officers and college heads have united in a bitter attack on the Department of Education and Science. They are angry at the way the city has been asked to place 13 per cent off its budget for higher education for 1980-81 of £14,644,000. The cutback comes because of the Government's new ceiling on the higher education pool.

They say the calculations were "crude" and "unfair" and penalized the city for being economic in the past. Most other local authorities, they say, are faced with cutbacks of between 5 and 10 per cent.

Mr Sydney James said: "Clearly to sell off the site and premises of one of our colleges would be a unique step. But there is no easy way out of this one. We are committed at present to a policy of no redundancies and we hope we won't have to change that. One of the options must be to merge some of the colleges."

Mr James was chairman of a working-party which examined the question of whether the City of

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British Council faces further £3.9m cut

The Foreign and Commonwealth Office has told the British Council to expect a further £3.9m budget cut over the next three years, bringing its total spending reduction to 20 per cent.

The new cut follows an inter-departmental Government inquiry into the council's work and is bound to result in a drastic curtailment of all its activities, and the loss of posts.

Areas at risk include the academic exchange programme, the provision of books and periodicals to overseas libraries and the sale of British educational goods overseas. Most of these activities have already suffered in previous spending reductions announced last year.

The combined effect of the new cuts with the old mean that the council's budget of £46.6m will drop to £37.5m. Some overseas offices may have closed as a result.

Workers will hours cut

This 25,000 manual workers in the universities have agreed a settlement which makes their first public sector bargain for a reduction in the working week, to operate this year.

Their hours will be reduced from 40 to 39 a week. The offer has been accepted an increase in their hourly rate ranging from £6.09 to £6.19 a week, and an annual holiday agreement which brings them into line with clerical workers and technicians.

NEXT WEEK

Rudolf Klein on social policy
Beginnings of the AUT
Bernard Crick on "The Greeks"
Four pages of sociology books
Dennis Welland reviews "London Yankees"

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THE POLITICAL QUARTERLY

Law graduates begin to feel the pinch

by Paul Flather

Law graduates face growing financial hardship in their aim to become solicitors and barristers. A new report published by the Association of Graduate Careers Advisory Services this week shows that more than a fifth of law graduates are receiving grants which are less than the mandatory awards set out in statute, and almost 10 per cent received no grant at all in 1979.

Grants for law students taking their final year professional exams or their preliminary common law professional exams are at present given at the discretion of local education authorities.

Dorset is one authority which has already decided not to give any more grants to law graduates as part of a general expenditure cut-back, and other local authorities may follow suit.

The report, based on a survey of almost 900 law graduates, reveals that 166 (18.9 per cent) received a full grant, a further 524 (59.8 per cent) received a grant adjusted according to parental income. Some 81 students (9.3 per cent) received no grant and 97 (11.1 per cent) received some money, but less than the "full" level. Most relied on support from parents and relatives and on savings to see them through the courses.

The problem of "poverty" did not ease off once law graduates had qualified and been taken on as articled clerks, the report goes on. More than two thirds were paid less than £2,250 a year—sometimes more than £1,000 less than fellow graduates working in industry or commerce, and this came after an extra year of full time study.

But those who managed to find work in the public sector in local government and the magistrates course—less than 10 per cent—were paid considerably more.

Questionnaires were sent out to more than 1,500 law graduates in April 1979 and the report was compiled by Mr Brian Read, Careers adviser at Sheffield University.

"This is the first time such figures have been collected and they show clearly that some students must be put off these courses if they cannot rely on sufficient backing. If you put up a series of obstacles which are easier for those with money to jump over, it would be unusual if they did not work in favour of the better off," he said.

"All those who get on to these courses should be entitled to grants. But with local authorities faced by all sorts of financial constraints, it must be very tempting for them to cut more of these discretionary awards", he said.

The Law Society, the Council for Legal Education, which together represent barristers and solicitors, and the careers advisory service, all made unsuccessful representations to the Government to include a provision in the new Education Bill allowing grants to be made—if necessary—by the DES.

Mr Christopher Snowling, secretary to the Law Society said some authorities had already decided to stop giving grants to law graduates. "But what is worrying is what will be put in jeopardy for education and training at a later year," he said.

Avon had made only a limited number of discretionary awards, Oxford were paying fees only, Northamptonshire were paying reduced fees and maintenance grant, and Cumbria and Leicestershire were among a number paying reduced maintenance grants.

* Becoming a Solicitor, the Association of Graduate Careers Advisory Services, University of Sheffield, Sheffield (price £1 post free).

Climatology weathers the storm

British universities and other research centres must be encouraged to use contract funds from international climatology programmes, a Cabinet Office study group warned this week.

In a report, *Climatic Change*, the group, headed by the chairman of the Government "Think Tank", Sir Kenneth Berrill, concludes that United Kingdom and international research plans are adequate for understanding the climate.

"We have not identified any major gaps in research coverage", it states the report from a team which included Sir Hermann Bondi, chief scientist at the Department of Industry, and Sir John Mason, director general of the Meteorological Office.

However, United Kingdom researchers should make greater use of funds made available for a proposed five-year, £5m, climate research programme to be sponsored by the Common Market. "The Natural Environment Research Council should be responsible for drawing attention of institutions to these opportunities", the report states.

In general, the group expects that modest climate changes will have little impact on Britain's economy. "We see no need for any new coordinating machinery or for a formal United Kingdom programme on climatology."

But the report proposes that the views of climatology studies be set up annually and that the group remain in existence to provide advice for this purpose.

The study, which was set up with the permission of the then Prime Minister, Mr James Callaghan, also highlights the likely consequences of increases of 1 to 2degC—an effect many people fear will result from increases in atmospheric pollution, particularly carbon dioxide.

"Estimates indicate that such a rise of 1°C in mean annual temperature would decrease demand by about 2 per cent, saving £250 million a year at current prices", the report states. This would have to be balanced by increases in sea level caused by melting glaciers—which would cost about £100m to raise defences by 0.75 metres.

A Cabinet Office spokesman said the report's conclusions had been accepted by the Government.

How a spy came back out of the cold

by Ngalo Crequer

The meeting of convocation at the University of London had probably never seen or heard anything quite like it. Called upon to discuss whether self-confessed spy Antony Blunt should keep his emeritus professorship, convocation resembled a cross between a Darby and Joan club and a boisterous student union meeting on freedom of speech.

For some weeks beforehand those that take the £2 necessary to accord life membership of the organization had been kept busy by new members wanting to take part in the great debate.

The press filled up a bench on the front, the BBC took comfort in a box on filming the event by catching people as they arrived and the university information officer was grateful it was not the weekend his rugby team was playing. The only thing missing, of course, was the star, Professor Anthony Blunt, who was not allowed as he is not a member of convocation.

Probably the happiest men were Dr G. E. Hunt, senior research fellow at the department of physics and astronomy, University College, who did a good warm-up job with his talk on "Exploration of the Solar System: the Earth in Perspective".

But soon the debate began in earnest and the names of Hitler, Stalin, Nixon, Nunn May, Vassall and Bingham were variously used to back up argument or made a point.

Professor Peter Lindsay, of King's College, who had to tread his way through piles of "rubbish" and similar academic arguments, put forward the motion against Blunt. "He betrayed his country for the most anti-social, anti-working class, anti-human ruling clique stalking in Moscow." What if he had betrayed us for Hitler, not Stalin. It was the selective rage for which we should have contempt, he said.

"What about Nixon" cried someone. "He was on our side" came the reply to general puzzlement.

A Miss Rivingholl, of the faculty of theology, spoke up against. She had been in the war office for a time, military intelligence and then, of course there were things that could not be revealed. But now the scandal was out.

And what had happened made it obvious to her "that he gave more information to this country by his service then ever he did the other been done for this country but it way. Much good, probably, has cannot be revealed."

Dr Amphlett Micklewright decided now was the time, at the age of 70, to make his maiden speech. He was against the motion. We were being asked to make up our minds on hearsay, on Mr Boyle's book and a "extraordinary" interview with a dying man ("and on his own confession," shouted someone).

If Professor Blunt had committed an offence it was for a judge and jury at the Old Bailey to say so, he said, bringing some majesty to the proceedings with his succint summary: "It is a bad principle to impose an academic penalty for a non-academic offence."

At this stage there was a complaint that speakers were being called in too random a manner. Should there not be one speaker for, and one against. While this was considered, one lady, put out at this suggestion raised a query: "How do I stand I have not made up my mind?" I suggest you might prefer to be seated until you have made up your mind," replied the chairman.

The speeches continued. One man suggested that if Nunn May had made public his information through a scientific journal rather then an embassy, he would have escaped censure.

Eventually the still undecided, but determined lady from Oxford, revealed as Miss Betty Corn, had her say. One reason for opposing the motion was that by degrading a person one was degrading the university, but on the other hand: "They were a pretty unsavoury bunch at that time", she said, referring to the Cambridge circle. "Not the sort of men you would like your daughter to marry" . . . "or even your son", she added to general merriment.

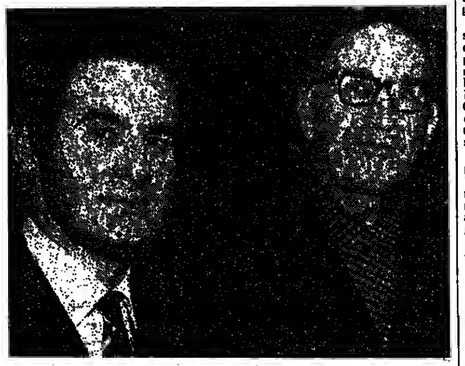
The question to be considered was, would Professor Blunt have been granted his distinction if we had known then what we know now.

By this time there was some question as to whether there should be a vote or the debate should go on.

"If the debate is to continue, will the clokkroom remain open?" a member asked anxiously. The chairman assured him he would not have to go home "in any unfortunate state".

Finally, the motion was put and convocation decided by 246 to 147, with 23 abstentions that Professor Blunt should keep his honour.

With that a great many members of convocation, and the press left, and a much smaller body went on to debate another great issue of our time, overseas students fees.



Professor Peter Lindsey (right) and Mr Peter Waters leave London University's convocation meeting last week after their motion to strip Sir Anthony Blunt of his Emeritus Professorship was defeated by 246 votes to 147.

Library chief calls for decision

An early decision on a new building for the British Library is absolutely imperative, Sir Harry Hookway, chief executive of BL said in his evidence to a select committee on education, science and arts last week.

He told MPs that for the last 25 years the library service had been under tremendous pressure and would eventually give way unless something was done.

"As yet, although the plans and design for the new library at Somers Town, Euston have been authorized, no final commitment to the scheme has been made by the Government" he said.

Pressed by MPs over the recent campaign being waged by a group of scholars led by Professor Hugh Thomas against the move and for retaining the famous round Reading Room in the British Museum, Sir Harry said it would be impossible to retain it in its present location.

Sir Harry said a group was looking at new technologies coming on to the market which were likely to last for 20 to 50 years.

The British Library was already spending £1m of its £35m budget on research and development aimed specifically at the development of a better central library network. At the moment this was enough but some new technological developments might demand greater expenditure. However, this was impossible to forecast, he said.

MPs lobbied on fees

Lord Annan, Vice Chancellor of the University of London and Dr Raoul Franklin, of City University or to join a lobby of MPs, later this month in protest against overseas student fee increase.

The lobby, which will take place on February 27th, has been organized by the Association of University Teachers. Local members are seriously concerned about the threat to London institutions posed by the Government's decision to charge full cost fees to overseas students, from the next academic session.

Students demand safeguards on new union funding plan

Students from all over the country meet in London tomorrow for an emergency debate on the financing of their unions following the emergence of new fears about the Government's proposals on the subject.

Having accepted the framework put forward last week by Mr Mark Carlisle, Secretary of State for Education, the National Union of Students is demanding safeguards on the operation of the system. Following two meeting of the NUS executive this week, the union promised stern opposition to the latest plans if guarantees were not forthcoming.

The source of their disquiet is a letter from Dr Rhodes Boyson, Under-Secretary for Higher Education, to Mr Trevor Phillips, NUS president. In it he appears to rule out national guidelines on the distribution of funds under the new system and makes clear that there will be no Government intervention in cases of dispute over student union funds.

In addition, he says there is no question of negotiation between NUS and the Government about sums to be made available for student unions, either to maintain the current level of support in the first year of the new arrangements or to set norms subsequently.

The new system would leave the negotiation of union funds entirely within the institutions concerned, the only external involvement coming from local authority representatives for polytechnics and public sector colleges. Per capita fees would be abolished since student unions would become just one of the facilities to be paid for out of an institution's block grant.

Having received Dr Boyson's letter, Mr Phillips said he was alarmed at the prospect of bitter clashes between students, staff and university or college authorities over the allocation of cash and resources.

Now NUS is seeking urgent meetings with the University Grants Committee, vice-chancellors, polytechnic directors, local authority representatives and campus trade unions to discuss the proposals. After these it is intended to make new representations to Ministers. They will propose that the legal independence of unions from college authorities is assured; that specific funds for unions are earmarked within overall budgets with students having a full say in local negotiations and the establishment of a nationally agreed system for monitoring the financing of unions.

Council row angers NELP director

by David Jobbins

The director of North East London Polytechnic, Dr George Brosan, has told councillors from three east London boroughs that their failure to agree on the size of the cut the college must face in 1980-81 has put him in an impossible position.

It is virtually certain that representatives from Newham, Barking and Waltham Forest will not reach a formal agreement on the resources they can make available to NELP until March 29—only a few days before the beginning of the new financial year.

Dr Brosan told the councillors it was impossible to plan until it was known what resources would be available. The director's forceful remarks came as the councillors failed to decide on a plan to phase a £4m cut in the budget over the two financial years 1980-81 and 1981-82.

Two boroughs—Waltham Forest and Newham—have still not met to approve the proposals. The third, Barking, has reconsidered its ability to make good the short-fall attributable to the "coupling" of the advanced further education pool, and has asked for a further £600,000 cut in 1980-81.

Unions of NELP fear that cutbacks of the scale envisaged will lead to the loss of up to 270 teaching and support staff.

A mass meeting of 800 workers from all five unions at NELP backed a package of measures including full consultations over the effects of the cuts on staffing. The meeting agreed to seek a no-redundancy agreement from the employers, and that individual unions should prepare for action to safeguard members' interests. One possibility to be explored is a one-day strike.

The unions reject the idea that NELP is a burden on ratepayers. For example in 1978-79, the total contribution by the three boroughs NELP substantially to the authorities that year amounted to nearly £520,000. The unions estimate that the staff and students in the polytechnic generate at least £15m a year in terms of spending in the local economy.

Dr Brosan said: "We cannot, in the time involved, make the savings required without the most appalling consequences for the polytechnic."

Dr Brosan confirmed that a number of contingency plans were in hand—including one to meet the extra cut sought by Barking if it was finally agreed.

TUC to go ahead alone with £1m college

A film residential college to train full-time union officials is to be set up by the Trade Union Congress despite a refusal by the Government to contribute to the cost. Mr Clive Jenkins, general secretary of the Association of Scientific, Managerial and Technical Staff, and chairman of the TUC education committee, said this week that the Congress would be asked to endorse the plan this year.

Premises have still to be found for the venture, but the TUC envisages a 100-bed college mounting short courses for the estimated 3,000 full-time union officials affiliated to the TUC and the country's 30,000 to 50,000 full-time shop stewards. Tutors would be drawn mainly from trade union staff, but lecturers in higher education might also be offered secondments.

Mr Jenkins said the Labour government had offered to help finance a similar scheme several years ago, but the new Government had refused to do so "at the present time". As a result, the TUC had decided to go ahead alone, raising most of the funds through loans from affiliated unions. ASTMS had already decided to lend £250,000 for ten years.

"The national centre will provide a great boost to the education services available to trade unionists. It will allow us to do more in-depth courses for union officers and for our key representatives. We will aim for—and we will get—the highest standards in this work", Mr Jenkins said.

Several trade unions—including the National Union of Teachers, the General and Municipal Workers Union and the National Union of Railwaymen already operate their own colleges. But the TUC believes there is still substantial demand for training in trade union skills which is not met.

Courses at the centre will include training in collective bargaining, employment law, using company accounts, dealing with industrial tribunals and relationships with the media. There would also be courses for senior shop stewards on industrial planning, industrial democracy and new technology.

An audience of 2,600 people from the world of education and the arts bee ben invited to take part in a TUC rally in April to promote the contribution of education and the arts to the quality of life. Mr Len Murray, general secretary of the TUC, and Mr Trevor Phillips, president of the National Union of Students, will be joined by George Molly, the Jazz musician, and the Royal Shakespeare Company Players, who will be performing free in protest at the cuts in education spending.

BBC promises equal cuts all round

Cuts in educational broadcasting at the BBC will not be disproportionately higher than economies made in other radio programmes, the corporation said this week.

This assurance followed reports that proposals to cut educational broadcasting by as much as 50 per cent are to be submitted to next week's board of governors for ratification.

The economies suggested by Mr Aubrey Singer, managing director of BBC Radio, propose cutting schools programmes by up to 50 per cent and adult education programmes by half.

Continuing education radio, which produced the highly successful literacy and language programmes, costs only about £600,000 and produces more than 300 hours of radio. Including the economies in schools programmes, the cuts would only save a maximum of about £100,000.

However this week the deputy managing director of BBC Radio, Mr Douglas Muggeridge, said the idea that educational broadcasting will be singled out for exceptionally heavy cuts can be ruled out.

The proposals to cut education broadcasting came as a bombshell to the educational broadcasting section. The present feeling in the BBC are now rethinking the proposals.

Open University programmes will not be affected by this round of cuts because they are paid for by the DES, but they may be rescheduled by the BBC to make way for general programmes.

Poly governors warn council

Governors of Huddersfield Polytechnic have warned Kirklees councillors not to interfere in its affairs.

They are determined to fight exclusion of the rector, Mr Ken Durands, from talks with the local authority on the audit report which has led to allegations of maladministration and an attempt by the authority to take over the polytechnic's day to day running.

In her first substantive comment on the affair, the chairman of the governors, Mrs Jane Carter said: "The interim audit report does not justify the measures the council has been advocating such as disciplining and/or dismissal of staff and the taking of control of the polytechnic by council officers and members."

Exaggeration in the report was greatly resented, and she rejected the "totally erroneous impression" that the polytechnic was "riddled with corruption and incompetence".

Legal, accountancy and educational experts have advised the governors that the conclusions of the report and decisions made subsequently by councillors are not justified, Mrs Carter said.

The rector has already been asked to respond to the allegations in the report and specify the action already taken to remedy any shortcomings.

Small colleges survival points to alternative

The ability of small colleges to overcome the obstacles to their survival will be a pointer to the fate of other sectors of higher education, including the universities, Mr John Barnett, chairman of the "college principals" group, has said.

Mr Barnett, delivering the Moodie lecture at York University last week, said the case for institutions with between 1,000 and 2,000 students to be recognised as a group providing an alternative type of higher education.

"Thirty to 40 such institutions contributing some 40,000 to 50,000 places to the national provision would be a sector of no mean significance," he said.

The colleges and institutes of higher education had developed out of a century and a quarter of ill defined, ill achieved aspirations". The cataclysm which followed the James report had left only 49 successors to the 160 colleges of education.

The surviving colleges should be tough and flexible enough to respond to the need for relevance in higher education now that the age of central direction appears to have passed, he said. Education, which had never felt the need to call itself, had to do so now speedily and effectively.

Stuart Hopps (left) is to be "choreographer in residence" at the South Glamorgan Institute of Higher Education for three weeks from next Monday. Seen here rehearsing members of the Jumpers Dance Theatre, Mr Hopps will give classes and lectures to students in all subjects.

Union told to cut officials

The chairman of Oxfordshire's education committee, Brigadier R. S. Streatfeild has told Oxford Polytechnic's student union to cut the number of its sabbatical officers from seven to three and warned that the National Union of Students affiliation fee should be collected from each of the 3,000 students next year rather than paid out of the local authority's grant.

In a letter to polytechnic director Dr Brian Lloyd, it is made clear that in the brigadier's opinion "there are an excessive number of officers of the union on sabbatical years.

"The chairman feels that there are as many as the county council is likely to accept in future", the letter, from the chief education officer, Mr T. R. P. Brighouse, continues.

On NUS affiliation, the letter registers the chairman's "concern" that it is not collected from individual students but paid "indirectly" by the local authority.

"The chairman would hope that this practice will not continue beyond the end of the current academic year", the letter says.

The council has not made clear what sanctions it will apply if the student union refuses to comply.

Students have been angered by what they see as a threat that guidelines laid down by the education committee must be followed to ensure the continuation fee.

Union president Ms Sarah Veale described the potential effects of compliance as "diabolical".

Any action by the authority may well be overtaken by the Government's plans for student union finance.

New calls for national body

Tougher guidelines on all new courses in polytechnics and colleges have led to renewed appeals for a national body to supervise higher education in the public sector.

The Department of Education and Science published a circular instructing that no new courses were to be approved unless there was clear evidence of unmet student demand and it could be provided for within existing resources of staff, equipment and accommodation.

Exceptions would be allowed only if the new course met a vocational need and gave students specific employment opportunities.

Mr David Bethel, chairman of the Committee of Directors of Polytechnics, said: "My first reaction is to hope these new guidelines will be applied across the board in higher education and not just to public sector colleges, and to point out that we believe nearly all our courses are designed anyway with the idea of some vocation in mind.

"This will merely tighten up existing procedures, but it all depends on what definition of vocational is used. At one time it meant training priests, lawyers and medics.

"This also reinforces what we have been saying consistently for the last three years—that we need some sort of national planning mechanism which will give us an overall strategy on these kinds of problems."

Ms Jean Bocock of the National Association of Teachers in Further and Higher Education, said the new circular would be lead to more "misunderstanding and suspicion". The final say on new courses lies with the regional staff inspectors who are accountable only to the DES.

"This circular tightens up both the letter and the spirit of the law. But we cannot assess the criteria that will be used across the country to validate these courses. What we need is a national body that is accountable publicly to do this job."

Quango hit by loss of top three staff

by Patricia Santinelli

The Department of Education's Further Education Unit, a survivor of the quangos and civil service manpower cuts, is to be hit by a more insidious blow, the loss of its key staff.

The FEU, which was established in 1977 with the aim of contributing to the general development of further education curricula, is to lose both its director and two leading development officers.

Mr Geoffrey Melling, the director who has steered the FEU since its inception has been recalled from his secondment by the HMI six months earlier than expected because it would be more advantageous to his career.

Both the development officers contracts run out in July. Mr Geoffrey Stanton, who has been the ministry of work on full-time manpower courses which resulted in the document *Basis for Choice*, has been recalled by the ILEA. Mr Ray Thorogood, the second officer, has been mainly responsible for work on further education provision for the young unemployed.

The disappearance of these three staff is not only bound to leave an important gap in the operation of the unit but will also break the continuity of its work. Already the unit is refusing work for after the summer.

The coincidence of events has led to rumours of a conspiracy to reduce the unit's major role in the further education and vocational preparation field.

However, those rumours are strongly denied by the Rev Dr George Tolley, principal of Sheffield City Polytechnic and chairman of the FEU.

Council votes to stop recognition of APT

by David Jobbins

Coventry City Council has voted to cease to recognize the Association of Polytechnic Teachers. This has made APT members at the city's polytechnic for the first time consider industrial action.

In an effort to pressure the Labour council into reversing the decision, the 200 APT members at Coventry (Lanchester) polytechnic are being balloted on withholding examination papers, boycotts of polytechnic committees, working strictly to contract, and other measures.

They are also angry that they may be excluded from a meeting this week between Professor Joan Mitchell, of the Clegg Commission on pay comparability, and members of the National Association of Teachers in Further and Higher Education.

The polytechnic has about 500 teaching staff.

Coventry's APT branch secretary, Dr Humphrey Smith, attacked the decision as "politically motivated and contrary to the express wish of the majority of academic staff."

An official NAS ballot in 1977 showed that 51 per cent of staff at the polytechnic favoured representation by APT, compared with 41 per cent for NATFHE.

"Thus we see Labour councillors, of all people, denying a group of the workers the right to collective bargaining by the union they have chosen—and the only one which represents specifically the interests of polytechnic teachers," Dr Smith said.

Coventry agreed in principle to recognize APT in the summer of 1978, but the decision to withdraw recognition was taken even before the precise details were worked out.

Dr Smith commented: "There is now a widespread and unprecedented feeling of anger among APT membership. For the first time ever proposals for direct action, in protest at the council's outrageous treatment of more than 200 of its employees, are actively being canvassed."

APT members at Coventry have been concerned by suggestions that they could lose their jobs if NATFHE secured a closed shop agreement.

"I do not think there is any serious policy on the part of councillors to bring this about but it is an indication of the council's present state of mind," Dr Smith said.

But Mr. David Jones, secretary of the polytechnic's NATFHE branch, said: "We have never discussed the closed shop at a branch because we accept the association's national policy that we do not support it. This branch has never pressed for a closed shop and I do not believe it ever would."

He said the branch would be pleased by the decision to withdraw APT's recognition. He could not see why APT should be included in any discussions with the Clegg Commission, as they could not negotiate on pay matters.

Slavists rebuff UGC attack on courses

by Ngaio Crequer

The British Universities Association of Slavists has criticized the University Grants Committee report on Russian studies for its ignorance, inconsistencies and insults to the academic profession.

The universities are still considering their replies on the report, which recommended that six should lose their Russian departments and that Russian studies should be phased out in a further 13.

Many staff have expressed their determination to fight the closures and at Sheffield, where the university department of Russian may come under the axe, the city council has written to the UGC to support the continued study of the subject.

Recommendations to phase out Russian studies at Keele, Queen Mary's College, London, Reading, Sheffield, Sussex, and East Anglia are, according to the association, "utterly irresponsible and indefensible."

"The choice of university departments which fall into this category is based on no clear criteria, and is manifestly unjust. The 26 lecturers involved, unlike their colleagues offerred by other proposals, and irrespective of academic merit, are not opportunely to be given the opportunity of joining another Slavonic department but are faced with the termination of their careers as scholars and teachers of Russian and Slavonic studies."

Slavonic scholarship would be set back many years if these people were forced to leave the profession.

The association is also critical of the suggestion that there should be inhouse movement of Russian based teachers to the teaching of English as a foreign language, extra mural studies, industry and commerce short courses and university administration.

"Is it seriously proposed that first-rate Russian scholars should be turned into unwilling and therefore third-rate teachers in other disciplines or into university administrators? The implications of this suggestion constitute an insult to the professionalism of more than one academic field.

They add: "... is it seriously considered the EFL teachers (given the increase in overseas students' fees), university administrators and extra mural teachers are more vital to the national interest in the present world situation than scholars of Russian?"

According to BUAS, the UGC report evaluates teaching in a purely quantitative way as being synonymous with numbers of students and staff and no attempt has been made to evaluate content, range, originality or success of courses. Although the UGC commends the development of postgraduate studies, it seeks to redeploy those scholars best fitted to supervise this research.

The UGC report states that the decline of Russian in schools is part of a general trend involving all modern languages, apart from French and that the imbalance should be brought to the attention of local education authorities.

BUAS says that this indicates that "... the UGC has recognized the need for a global approach to modern languages in the country's education system as a whole. It would therefore seem premature and irresponsible to propose a cutback in Russian before such an approach has been formulated; the damage would be easy to inflict, but impossible to repair." The UGC would only exacerbate a situation it deplores.

The Slavists say that the long term term planning is based on a chidely simplistic view of "supply and demand" which takes no account of the importance of Russia in this modern world.

Sheffield councillor Winifred Colding, a former mayor, said the university helped industry and commerce by supplying interpreters and translators, and were at great pains when Russian firms wanted to buy Sheffield equipment.

Chinese scientists to train in engineering at Cranfield

A total of 18 scientists from the Peking Institute of Aeronautics and Aeronautics and other research institutions are to be trained in a Chinese foreign policy to Cranfield after special advanced engineering courses at Cranfield Institute of Technology this year.

And in return, Cranfield professors are to be invited to go on lecture tours in China and a series of short courses on electronics will be taught by institute staff in Peking this year.

The agreement setting up the exchange follows a recent visit to the Institute by the vice-chancellor of the Peking Institute, Professor Shen Yuan. The Chinese had originally proposed to send about 50 staff and students to Cranfield but financial and planning difficulties prevented this.

Now a total of 18 candidates—each paying £4,000 for their training—will come over and at the end of their first year, Cranfield will decide which of them should remain for a further year. Further Peking staff will be nominated by the Chinese for entry to Cranfield after the 1980 intake.

The aim of the visits is to help the Chinese with their industrial modernisation programmes, particularly in aeronautics, mechanical engineering and electronics, which fell further behind Western technology during the years of the cultural revolution.

Other parts of the scheme will allow Chinese students to be considered for places on normal postgraduate degree courses under reciprocal arrangements nominated by the two governments and including the new fee arrangements for overseas students at United Kingdom universities.

Two Chinese professors will also visit Cranfield for a month later this year and the library services of the two institutes are to exchange information regularly.

Charcoals, line drawings and oil paintings by Steve Walker, the artist and poet, will be on view in Gallery 273, at Queen Mary College, London, from February 20 until March 10. The exhibition is open between 10 and 5 on Mondays to Fridays.

Fees scheme launched for top students

Universities will this week be receiving details of the fees support schemes for overseas postgraduate students of outstanding merit and research potential.

For the session 1980-81 between 400 and 500 awards will be made to students commencing full-time study for a higher degree by research at a British university or at the London and Manchester Business Schools, the Royal College of Art or the Cranfield Institute of Technology but will not be available for postgraduate instructional or taught courses.

The criteria for the awards will be outstanding merit and research potential and other factors, such as means, nationality, proposed field and institution of study, will not be taken into account.

The annual value of each award will be the difference between the tuition fee for a home postgraduate student and that chargeable to an overseas postgraduate student for the particular research course. The award-holder will pay the home student fee and the difference will be paid from the scheme to the academic institution with no money paid direct to the award-holder.

Each award will be made for one year and subject to the satisfactory performance of the student, it will be renewed according to the length of the course.

The scheme is being administered by a special overseas research committee of the Committee of Vice Chancellors and Principals but students must apply through the institutions. Applicants, who must normally be university or CNAA graduates or expect to be, must have been conditionally accepted for admission to a research course by one of the academic institutions. Upper second close honours will be the minimum standard.

The institutions will make a first selection of applications and those which they decide to support will be forwarded to the CVCP, which will make the final decisions.

The closing date for applications made to the registrar or secretary of the academic institution is April 25, 1980 but the CVCP must receive the application forms should be submitted well in advance of this date in order to give time for references to be taken up and consideration given to all students.

Registrars or secretaries will need to forward their applications to the CVCP by May 23, 1980 as the intention is that the results of the 1980 competition will be announced by July 18.

Applications must be made on the official form ORS/1 copies of which can be obtained from the registrar or secretary of any of the academic institutions.

Full fees 'would be catastrophic' for poor countries

Numbers of students from the poorest countries have declined sharply over the last three years and would be affected catastrophically by the introduction of full-cost tuition fees, says a report published this week by the World University Service.

The report, *British Aid for Overseas Students*, contends that there is no effective government policy on overseas students and that MPs have had to take decisions without accurate information. Statistics on the subject are often late, frequently misleading and at times inaccurate, it says.

In a detailed analysis of the effects of previous fees rises Mr Alan Phillips, general secretary of WUS (UK), argues that steady increases in the number of foreign students are accounted for by the formerly weak pound and rising numbers from Middle Eastern and other oil-rich nations.

The total increase from 75,800 in 1975-76 to 86,100 in 1977-78 can be accounted for entirely by four countries, Mr Phillips says. During this period the number of students from the Middle East and those from exporting countries rose by 36 per cent while the number from the least developed nations dropped by 23 per cent.

Mr Phillips contests the impact of full-cost fees next year to that of previous increases imposed against the background of a falling pound. The cost of studying in Britain weighted by the Sterling Index which plots the value of the pound against other major currencies, is said to have fallen in real terms between 1975 and 1977 despite fee rises. But in the following year true costs soared by 30 per cent.

Now, with unprecedented rises combining with a relatively strong pound, the effect on numbers is likely to be dramatic. And there is almost certain to be a further decline in those financed by the British Aid Programme, which has already seen a drop of 23 per cent in the past three years for which figures have been published.

The number of overseas postgraduates may well tumble from 1,300 four years ago to only 400 next year if remedial action is not taken promptly, the report says, although no data will be available until after the end of the following academic year.

By introducing full-cost fees an indirect aid contribution of £50m in subsidized education will be withdrawn at a time when the official aid programme already provides less education for trainees and students from developing countries than either France or Germany.

The report concludes that a comprehensive, long-term plan is needed to determine policies and priorities, while immediate remedial action is essential to offset the harmful effects of full-cost fees for students from poor countries.

Part-timers demand compensation for lost jobs

Part-time teachers at Richmond College in London who lose their jobs as the result of local authority cutbacks are to fight for compensation, backed by their union the Association for Adult and Continuing Education.

The jobs of the 300 part-time tutors are threatened because of a 30 per cent cut in Richmond borough's grant to the college next year. The borough will be providing only £350,000 towards a total budget of £750,000.

Although the college can provide £200,000 from its present level of income from fees, but the anticipated shortfall of £200,000 will have to be covered by doubling fees and possible redundancies.

One of the reasons for putting up the fees is to give some opportunity for the salvation of part-time staff. "It is a cause for concern", said the college's principal, Mrs Margery Loslie.

The AACE is to seek financial compensation for any staff who have been made redundant because many of them do not work long enough hours to be covered by the Employment Protection Act.

Officials in the AACE, who have already met Richmond's director of education, are now seeking a meeting with the chairman of the education committee. They are angry that the college, which has a world-wide reputation, is being singled out for financial cuts which are out of all proportion to reductions in the statutory sector.

YOP facelift considered

A new initiative to improve the quality of the Manpower Services Commission's Youth Opportunities Programme is being planned, a chief education officer level.

Mr John Tomlinson, director of education for Cheshire and the education representative on the MSC special programmes board, to convene a meeting of chief education officers to discuss how the further education element of YOP can be increased.

The aim is to achieve a 100 per cent coverage. At the moment only 22 per cent of the schemes contain a further education element, and for work experience schemes this is even smaller at 11 per cent.

Mr Tomlinson said that the whole arrangement had been wrong from the start with further education getting a very small share of the funds.

Correction

The journal *Annals of Science*, mentioned in an article on history of periodicals by Professor Irene Robb in *The Times Higher Education Supplement* of January 25, is not a Polytechnic and not by Middlesex Polytechnic.

North American News

Carter leaves Soviet-American exchange structure untouched

from Clive Cookson

WASHINGTON

Despite the curtailment of Soviet American scientific and cultural exchanges ordered by President Carter after the Russian intervention in Afghanistan, and the outrage expressed by the American academic community at the banishment of Andrei Sakharov from Moscow the United States is taking care not to damage the basic structure of the exchanges.

As the president's science adviser, Frank Press, told a recent congressional hearing, "we have taken a deliberate decision to focus our restrictive measures against activities and events not against the framework of the agreements themselves."

The "activities and events" that have been scuttled are essentially meetings and seminars that involve senior American scientists and government officials, and transfers of equipment and technology in the Soviet Union. Therefore the United States government has "indefinitely postponed" three high-level meetings scheduled for January and February.

A 50m apparatus for energy research, known as a magnetohydrodynamics channel, which has been built in the United States to be tested at a facility in Russia, will not be shipped to Moscow after all.

In the cultural field, a huge art exhibition from the Hermitage museum in Leningrad will not come to the National Gallery in Washington.

Essentially, high visibility exchanges, as they are known here, have been stopped. Low-level exchanges of individual scholars and researchers, which really form the heart of the exchange programmes, are going ahead at least in fields that do not involve high technology.

"We are now examining each individual activity under all 11 of the bilateral agreements to determine whether they are appropriate under the present circumstances", said Dr Press.

However, on the American side, exchanges depend not only on government policy but also on the willingness of individuals to take part in them. Since Dr Sakharov was sent into exile in the closed city of Gorki—an action that brought more protests from the academic community than the occupation of Afghanistan—a number of prominent American scientists have denounced the Soviet government and some have announced personal boycotts of the Soviet Union.

For example the leaders of the 5,000-strong Federation of American Scientists held a press conference in Washington at which five American Nobel laureates pledged not to participate in Soviet exchange programmes until Dr Sakharov is allowed to return to Moscow.

Andrei Sakharov's arrest in Moscow has outraged many American academics.

Despite such well-publicised protests, "very few" American academics have so far turned down planned visits to the Soviet Union, according to a senior state department official. However, he added that it was still much too soon to assess the full impact on the Sakharov affair on academic opinion.

Although the structure of Soviet-American exchanges is quite complicated, it can essentially be divided into two parts. The oldest agreements date back to the cold war and were negotiated under President Eisenhower in 1958-59. They involve about 130 scholars a year from each side, of whom about 30 are under the auspices of the National Academy of Sciences (NAS) in Washington and a hundred under the auspices of a non-governmental organization called IREX (International Research and Educational Exchanges).

During the warm years of détente between 1972 and 1974, the Nixon administration negotiated 11 new bilateral exchange agreements, each covering a separate area (for example, health, agriculture, transport, energy, environment, etc). They are bigger than the original programmes, involving about 750 exchanges each way, and rather than basic research they tend to cover applied research and development.

The latter programmes are much more susceptible to curtailment than the IREX and NAS ones, because they are themselves fruits of détente and therefore more liable to be damaged.

IREX executive director Allen Kassof clearly believes that it would be a tragedy if his programme, "which has been functioning for 22 years through some very rough times including the Vietnam War and the Soviet invasion of Czechoslovakia", were damaged by the current events. "The whole purpose of establishing IREX was in fact to insulate the exchanges as far as possible from the changing winds of politics. Our exchanges were never conceived of as appeasing the behaviour of the other side", said Mr Kassof.

The most compelling argument for preserving exchanges is of course that they afford access to an otherwise closed society. In the social sciences and humanities they are the only possible means of practical training for American experts on the Soviet Union, and they provide a channel of communication with the intellectual and policy making elite in Soviet Society.

Although American officials do not like to speak about it in public, another factor that makes them reluctant to drop the exchanges with the Soviet Union is that this would have the indirect effect of further isolating intellectuals and scientists in the other communist countries of Eastern Europe.

In the sciences, most American participants seem to think the Soviets derive more short-term benefits than they do, though, they believe the programmes are in the interests of both sides and indeed of mankind in general.

Ironically, the current threat to the exchanges comes at a time when the quality of Soviet participation is, according to Dr Press, improving. More of the best young Soviet scientists, including Jews, are being allowed to take part, and they are being more forthcoming in areas where Soviet knowledge is most advanced, such as physics, electrometallurgy, fusion and magnetohydrodynamics.

Everyone agrees that early 1980 is a particularly critical period for the future of scholarly relations between the United States and the Soviet Union. More clues about future developments may be given on February 18 when the Scientific Forum, a gathering under the 1975 Helsinki agreement on European security and human rights, opens in Hamburg, West Germany.

Top level scientific delegations from 35 countries, including the USSR and USA, will be there, and the leader of the American delegation, NAS president Philip Handler, said he would deliver this message to the Russians:

"By flouting the standards of human decency, by creating an atmosphere of tension and fear, Soviet authorities have angered and alienated the scientists of the United States and of the West. In so doing they have isolated their scientific community from the one resource they crave more than any other—the stimulation and creativity of free minds".

Chinese keep low profile on university campuses

Mr Deng has kept the lowest possible profile. He has refused to discuss his father or his family with anyone, according to the university spokesman.

The growth in educational and scientific contacts between the United States and China since the normalisation of relations a year ago has exceeded even the high expectations written into the agreements then. The committee for scholarly communications with the People's Republic of China, which is part of the National Academy of Sciences, says there are at least 1,100 Chinese students and researchers in the United States.

Seven hundred of them are financed by the Peking government under various official United States-Chinese educational and scientific programmes or bilateral agreements between American universities and individual universities or institutes in China. For example, the University of Minnesota has signed formal exchange agreements with seven Chinese institutions and reached informal understandings with several more. Fifteen Chinese scholars and two postgraduate and two undergraduate students are currently in Minnesota, and the university has received applications from 60 more.

The remaining 400 Chinese students and scholars in the United States are supported by various private and non-Governmental sources. The favourite method is to persuade relatives outside the People's Republic — normally Chinese Americans, though family members living in Hongkong, Malaysia and Singapore have also been tapped—to pay for one's education. The Chinese Government is willing to allow some of its citizens to travel or study abroad if they do not have to take money out of the country to do so.

But, says Halsey Beemer, deputy staff director of the China committee, said, contacts have been established so fast that it is impossible to keep track of the "endless permutations of funding" and the different institutional arrangements. One amusing case involves a Chinese woman who was offered a fellowship at a small private college in California in 1949. She was unable to take it up because of Mao's revolution. Thirty years later she wrote back to the college and asked if her fellowship was still available. The college said yes and she is now studying in California, according to Dr Beemer.

The typical government-sponsored Chinese exchange student is a scientist in his mid to late 30s. His postgraduate studies were disrupted by the cultural revolutions, which threw all the country's universities into turmoil between about 1966 and 1976, and, because younger men and women have not yet graduated in sufficient numbers since the fall of the "Gang of Four", he has been sent to a prestigious American university to catch up as quickly as possible with recent advances in the field.

After spending three years in the United States, living in ordinary graduate student accommodation without his wife and family who have stayed behind in China, he will return to help achieve his government's extraordinarily ambitious goal of catching up scientifically with the West by the year 2,000. He is a very serious, quiet student, who avoids political arguments and works hard even by the standards of a dedicated American PhD student.

This typical student (who is based on your correspondent's own meetings with Chinese students in Washington and on conversations with American academics and administrators in Hkoly to achieve academic success in the United States.

The privately sponsored Chinese students are a more heterogeneous group. They include a larger number of young undergraduates, and more people studying arts, languages and humanities, than the Government-sponsored exchanges, which concentrates on postgraduate scientists and technologists.

Scholarly traffic in the opposite direction has been much lighter. According to the China committee, about 100 Americans are currently studying in the Peoples Republic. Of these, 28 graduate students and 16 senior researchers are there under the official exchange agreement, financed by the United States government, and the remainder have been sent by their universities or by private organizations.

Although some of the Americans are natural scientists, the majority are working in the humanities and social sciences.

Large numbers of American academics have also visited China for shorter periods to give lectures and seminars on all manner of subjects. For instance five law professors from Harvard, Columbia, New York University and the University of Connecticut gave a month long seminar in Manchuria on comparative tax law. That sounds absurd, but the Chinese government is faced for the first time since 1949 with the problem of developing a tax system to deal with the foreign investment it is seeking to attract.

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Eskimos hit back at alcoholism charge

Three American academics have shocked and outraged the Eskimos of Alaska with a study that shows them to be committing "almost a willing genocide" through drink. Seventy-two per cent of the 1,800 adult Eskimos living in the town of Barrow on the north coast are "alcoholic" or "aggressively alcoholic", according to Drs Edward Foulkes and Samuel Kleusner of the University of Pennsylvania and Mark Moore of Harvard University, and over half the population has been jailed for drunkenness. They also found horrifying rates of alcohol-related violent deaths, attacks and illness.

When Dr Foulkes, who is professor of psychiatry and anthropology, flew into Barrow after the report was released last month, he found the mayor (Mr "Antiaus" Mayor) Eben Hobson had just sacked the town's police chief, Kim Moller, who was instrumental in commissioning the study, and denounced its findings and methods.

Despite fears for his safety, Dr Foulkes faced the fury of hundreds of residents during a seven-hour public meeting. He said afterwards they refused to believe that alcoholism was nearly as bad as the study found, though they did not deny it was a problem, and they accuse him and his colleagues of racial and cultural bias.

"There's a wholesale attack on the validity of our study", said Professor Kleusner. Both the sampling method and the Michigan alcoholism screening test (MAST) which is used to determine the level of alcoholism in Barrow have been challenged by the natives. The researchers say that they took a random 10 per cent sample and that the test is valid for cross cultural epidemiology.

Foulkes, Kleusner and Moore, who were working under the auspices of the centre for research on the acts of man at the University of Pennsylvania, expected an adverse reaction from the Eskimos, though not from the local government, which commissioned the study.

"I can see how holding up this kind of mirror to a community, and calling the attention of the entire nation to their plight, is not flattering and is in fact confirming some unfortunate stereotypes people have of some native people", said Dr Foulkes. "But our study really only puts numbers on what was quite apparent to everyone. I was not terribly surprised that people felt very sensitive about the study and reacted negatively—the numbers are jarring, they're startling, they are de facto insulting."

Dr Foulkes fears the report "will be thrown out along with the researchers themselves and will be dismissed with simply a racist labelling". He hopes, though, that the anger it has generated will catalyze action to deal with the problem.

"If they threw all the numbers away and just do something about the alcoholism, I will feel not only vindicated but very happy with the results of our research", said Dr Foulkes. "The problem is so serious, and so severe, and there are so few communities in this area of the Arctic which have a grip on solving this problem. It's rampant, it's killing people—it's genocide, yet almost a willing genocide."

No epidemiological study of alcoholism among Eskimos had been done before although it has been identified as a serious problem for several years. The general level of alcoholism in the United States populations is around 10 per cent, compared to the 72 per cent figure found for Barrow.

The study links the Eskimo's cultural deterioration to the influence of the American cash nexus and bureaucratic structure on a society of aboriginal hunters and fishermen. Similar problems afflict Eskimo communities in northern Canada, and indeed native peoples overwhelmed by Western civilization elsewhere in the world, but they are particularly severe on the north slope of Alaska because of the oil there. Barrow's oil revenues amount to an average $20,000 per inhabitant.

The Eskimos start drinking young and children are initiated by their parents into the rights of alcohol. They like hard liquor and when a bottle of whisky is opened it is bad form to stop drinking before it is empty. Sharing a bottle has become part of the social ritual of coming together for a visit, according to the study, and it is an affront to refuse to drink with your friends and relations.

Barrow, whose population is about 85 per cent Eskimo, has no liquor shop, so all the alcohol has to be flown in. Buying and selling spirits within the town is illegal, but there is no indicator bootlegging operation, which makes it impossible to estimate accurately the volume of alcohol consumed by the Eskimos, according to Dr Foulks.

Violence is not part of the native Eskimo culture. Nor is alcohol, since there was no agricultural product readily available for fermentation on the Arctic Tundra. But now, under the influence of alcohol, Alaskan Eskimos have a higher murder rate than any other group in the United States: the homicide rate for native Indians and Eskimos is about four times that for whites in Alaska. Two-thirds of the attacks are carried out at home on family and friends.

Dr Kleusner, who is director of the centre for research on the Acts of Men, says "offshore oil development is expected to peak in 2010 or 2015 and we don't see the Eskimos surviving till then" unless something is done to solve their drinking problems.

Overseas News

Worry over recruitment tactics

from Michael Binyon

MOSCOW

Soviet academics are increasingly worried that many universities and institutes nowadays do not bother to advertise vacancies and pick new lecturers only from former research students and people already known to them.

A rector of a polytechnic recently told the Communist Party newspaper *Pravda* that public advertising of posts was becoming a mere formality and many teachers were now assigned virtually without competition. He said this artificially limited the institution's opportunity to improve the quality of its teaching staff, and led to complacency and inertia.

Citing the case of Saratov Polytechnical Institute in central Russia, *Pravda* said when there was a vacancy a brief advertisement was placed in a local paper.

A copy was sent to the research institute in Krivoirog in the Ukraine where a former research student at the Saratov Polytechnic was working. He applied and was immediately accepted. When *Pravda* asked the polytechnic's personnel director whether anyone else was considered, he said no other candidate had applied.

The paper said dozens of similar examples could be found in higher education institutes in any city.

"Need it be demonstrated how important it is for a competition to be a competition—a contest of scientific knowledge, the art of teaching and skill in lecturing?", the paper asked.

The problem was how to ensure a rigorous and objective selection when only one specialist applied for a post. If a candidate did present himself from some other quarter, he was usually given a transparent hint that the post was taken but he was free to submit his credentials.

Soviet colleges and universities accept only those known to them because of the difficulties of getting rid of anyone unsuitable. As a result, applicants do not take public advertisements seriously, and generally ask whether the university has his eye on anyone in particular.

Public advertising is usually confined to a brief announcement in the local press, and no vacancy lists are distributed throughout the country, or even throughout the 15 soviet republics.

Professor A. Andryushchenko, rector of the Saratov Polytechnic, said the wish to pick an absolutely dependable candidate in advance was based on the fear of making a mistake.

"Instructors and scientific staff members are chosen for five-year terms. The term is guaranteed, and if no extraordinary circumstances occur, no one has the right to question a person's suitability for the position he holds.

"An instructor can give lectures brilliantly or just passably, do excellent or slightly below average work, and no one has any formal grounds for reproaching him."

Thus the time had come, the rector said, for the Ministry of Higher Education and the Higher Certification Commission to draw up detailed requirements for specialists who were candidates for higher education vacancies.

Pravda said it had received a number of proposals for improvements in the system of academics. Many thought that annual certification of the teaching staff was essential. This would be better proof of the employee's worth as an instructor and scientist.

At present one of the main yardsticks by which an institution was judged was the number of teachers with higher degrees and titles. *Pravda* wonderded whether it necessarily followed that the higher the percentage, the better.

"It is no secret that institutes, for the sake of a high percentage of 'degrees' personnel, are sometimes obliged to retain people with inadequate teaching qualifications but who, on the other hand, have a Candidate of Sciences' Diploma. The teaching process naturally suffers from 'percentomania' of this sort."

There was no shortage of efficient instructions telling universities how vacancies should be filled. The trouble lay in the existence of exceptions to these rules, which frequently became the rule.

The regulations stipulate that a Candidate of Sciences cannot be elected head of a department for a second term. But there is a reservation: this is permitted in certain cases with the permission of the ministry or department.

So on the eve of the expiration of the terms of appointment of department heads who have not yet defended doctoral dissertations, thus qualifying for a PHD degree, rector's offices often start trying to obtain approval for the re-election of "good people".

They are usually successful. As a result, *Pravda* said, the effectiveness of that competition rule, whose intent was to stimulate scientific creativity, was nullified. "Inertia and complacency on the part of a certain percentage of higher school pedagogues are encouraged, willy-nilly."

Intelligentsia not used to best advantage

from Sue Masterman

VIENNA

The Hungarian intelligentsia comes from a broader social basis than before the war, and make their knowledge and talents available to a wider section of the community but are not being deployed to the best advantage, according to Bela Kopeczi, acting secretary-general of the Hungarian Academy of Sciences, in an article in the Hungarian publication *Magyar Nemzet*.

Mr Kopeczi estimates the number of Hungary's intelligentsia today at 300,000 compared with 90,000 in 1945. Whether this increase is relatively large or not is a point of discussion, says Mr Kopeczi who points out that there is a worldwide tendency in the increase of the intelligentsia.

In postwar Hungary 34 out of every 100 with academic qualifications were lawyers, 21 in the teaching profession, 13 technicians, eight agricultural experts and four economists. The number of agricultural experts has increased fourfold; there are six times as many economists and five times as many are in the teaching profession. Nevertheless there is still a relative shortage of agricultural experts, and a glut of other academic specialists such as philologists.

The location of the Hungarian intelligentsia has also changed. At present 43 per cent live in Budapest, a third in the larger provincial towns and just over a fifth in the country. Formerly, according to Mr Kopeczi, the intelligentsia was concentrated in the major cities and was represented in the village community only by the priest, the lawyer, the head of the local school, the doctor and the pharmacist.

Nowadays the intelligentsia in the cities mainly belongs to the group of lawyers and technicians while those who are employed in education or the health services are spread across the country. Mr Kopeczi notes fairly, however, that there are problems concerned with persuading doctors and teachers to settle in the smaller communities.

Seven times as many women can be classified as belonging to the intelligentsia compared with 1945. The number of men have increased by two and a half. Certain professions have also tended to attract more women. In 1970 57 per cent of the teaching staff, 38 per cent of those employed in the health services, 32 per cent of the economists and 12 per cent of the technical intelligentsia were women.

Mr Kopeczi says that this tendency, although worldwide, is specifically a development typical of the socialist system. So he says is the shift in the origins of those now counted as intelligentsia. In 1938 the fathers of 7.4 per cent of the intelligentsia were skilled labourers, 3.4 per cent unskilled labourers and 17.1 per cent farmers or farm labourers. Nowadays the fathers of 17 per cent of the intelligentsia in Hungary are skilled labourers, 9 per cent unskilled labourers and more than 20 per cent farm labourers.

The main reason for this development is the general availability of higher education to a broader social group, says Mr Kopeczi. But, he continues, the Hungarian system is still far from offering equal opportunities to all.

"The reason for unequal opportunities should mainly be sought in the fact that the social environment does not always inspire equally to further learning, nor does it always provide the same cultural basis", he says.

The creation of truly equal opportunities should, the writer says, be one of the main objectives of Hungarian politics. Mr Kopeczi then touches on one of the most sensitive questions in all Communist countries—the relationship between and the role of the intelligentsia and leadership.

The number of political leaders with higher education has increased considerably during recent years, he says. Political power is exercised by the working class, but it is important that there should not be a rift between political leadership and management. That is why the increase in the number of more highly educated and qualified political leaders is important.

That the present social and economic climate does not function satisfactorily for all members of the intelligentsia is admitted at the end of the article. Seventy-two per cent of graduates in management have jobs in the sector for which they have been educated. The remaining 28 per cent have not. This leads to discontent and disillusionment.

Lastly, Mr Kopeczi points out that the intelligentsia, and particularly those in management, need far more education and training on communication with those they manage.

Conference diagnoses but fails to cure

by John O'Leary

Three days of discussion in Paris last week revealed remarkably similar sources of disquiet among academics from 23 countries but produced few remedies.

The problems of diminishing financial support, popular disinterest or disenchantment with universities in particular and the declining attraction of higher education to the young were all identified as common treks. The need for greater co-operation with the outside world was universally accepted in order to provide a new impetus for higher education.

But an unwieldy gathering of more than 160 delegates who, with this exception of a nucleus of specialist advisers, were almost all academics or educational bureaucrats, was never likely to agree on a course of action.

Although the Organisation for Economic Coopsration and Development's conference was entitled Higher Education and the Community, only the British and Dutch delegations included members from the world it was hoped to serve. As a result, much of the argument centred on the nature of the community, and its requirements from educational institutions.

Research carried out in several countries showed that popular awareness of the work of higher education and the availability of facilities in its institutions varied considerably but that everywhere there was scope for improvement.

Professor Eric Bockstael, of Wayne State University, Detroit, said there was "an ecological crisis" in higher education's relationship with the community, although Professor Arthur Brownlee, of Griffith University, Brisbane said the picture was not all bleak and there was no need for panic.

A survey carried out by Professor Bockstael among a small but representative sample of American workers showed that respondents had no conception of what research was undertaken in the university and had ideas on the formation of links with it.

Professor Brownlee had found that lay members of the community did have ideas on the role they wanted a university to play and Professor Toru Umekathi revealed that more than a third of those surveyed in Hiroshima had participated in some university activity during the previous year. But the majority of delegates accepted that institutions should adapt a new role.

It was left largely to the Business and Industry Advisory Committee to OECD to remind the conference of the dangers of too drastic a change. In initiating links and promoting activities with the local community institutions should have careful regard to the considerable implications for public expenditure, which might place at risk their primary teaching and research functions and their existing relationships with industry and business, a BIAC paper warned.

The secretariat of OECD produced the only formal proposals for conclusions, concentrating on greater harmonisation of policies among institutions in any given region and the development of admission requirements to facilitate access by new groups. Delegates baulked at the concept of coordination, fearing for the autonomy of institutions, but supported a change of balance in research so as to allow more applied work.

Number of graduates on the increase

by Günther Kloss

The Federal Education and Science Ministry recently predicted that West Germany the number of graduates among the working population will reach 11 per cent in 1990. The rise has been continuous since 1970 when it was only 6 per cent.

The Federal Government, which through a 50 per cent contribution in all higher education expenditure over the past 10 years has contributed substantially to the increase output of graduates is rightly proud of this achievement.

On the other hand there are difficulties in finding employment for these graduates. In certain occupations, above all teaching, there are likely to increase substantially during the next few years. According to the Nuremberg Office, Labour Office 24 per cent of the total of unemployed graduates are already those with a teaching qualification. The Hamburg Office for Schools a few weeks ago saw that by the end of the decade one in three of all qualified teachers would be unable to find a job.

As the Education Trade Union was quick to point out this course, assumes virtually no improvement in the pupil-teacher ratio which on average is particularly unfavourable in primary schools (28.6 to one) and in secondary schools (34 to one).

It also takes no account of as yet rather feeble attempts to introduce shorter arts-type university courses which will qualify successful graduates for a much wider range of jobs than traditional teaching professions.

To balance the picture, in 1979 there were only 36,000 unemployed, the then 775,000 unemployed, the percentage of unemployed among graduates has been consistently lower than that of those out of work without a degree or diploma.

The latest available figures indicate that there is currently a vacancy for only one in two graduates registered as seeking employment. But the situation varies between different sectors of employment.

Apart from prospective teachers graduates in sociology, politics, psychology find it more difficult to find jobs, while there is a shortage of doctors, mechanical engineers, and electrical engineers. The situation for architects is not quite so improving.

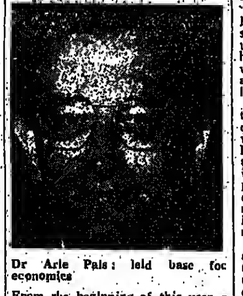
The Labour Office reports that public employers as well as private companies are looking for more applicants with two to four years' practical experience—which, of course, mitigates against new graduates.

Unemployment among women graduates is higher than among men, and is increasing. This is not merely the results of the sex bias increase in the percentage of women embarking on a higher education courses (41 per cent of women first-year students in the summer term 1979, compared with 31 per cent in 1970) and therefore a proportion of the total population (36 per cent).

It also highlights the fact that the number of women applying teacher training colleges and training art-type subjects at universities has been growing disproportionately fast.

A new initiative of the Nuremberg Labour Office indicates the overall view it takes of the overproduction; it has decided to close from April 1980 employment advisory offices in 19 towns with universities and colleges.

Professors lose status



Dr Arie Pais: held base for economics

From the beginning of this year a Royal Decree has allowed all Dutch "lectors" to use the title professor. However, they will receive no accompanying increase in salary and all new professors to be appointed will be placed on the old "lector" salary scale.

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In doing this, Minister of Education

Students barricade principal

More than 100 second year bachelor of education students at the Kenyatte University College, part of the University of Nairobi, barricaded their principal, Mr J. K. Kolnange, and other members of staff in the college's administration block for several hours.

They abandoned their action after Kenya's Minister of Higher Education, Mr J. J. Kamotho, visited the college and told the students their demands would be examined.

The students were protesting against a change in the conditions under which they would undertake teaching practice. They wanted to choose the schools where they would undertake teaching practice instead of being sent to a limited number of schools in the Nairobi area.

They were also protesting against a reduction in the total teaching practice period from eight to six weeks, to only six weeks, called for.

Riot police were called to the college, but did not disperse the student demonstrators as initially asked and said it resulted from a lack of effective communication.

Decision time for the one that got away

John O'Leary sees how Rolle College is weathering the numbers game

Probably the most celebrated case of an institution escaping with its life from the 1977 cuts in teacher training against the odds was that of Rolle College, Exmouth. The little Devon college forced itself into the public eye with an imaginative and ultimately successful campaign to defeat the Government's proposals to close it down.

Staff, students, the local authority and numerous supporters from the region took on the Department of Education and Science when it appeared on Mrs Shirley Williams's list of proposed closures. Mr Francis Cammaerts, the principal, used all the political expertise he had acquired during years as prominence in the National Association of Teachers in Further and Higher Education. By the time the final list was announced Rolle was the one college everyone expected to be reprieved.

It escaped with a reduction, albeit a severe one, in its initial teacher training places and was faced with the task of diversification to ensure its future. Now, like many another college, Rolle finds itself in the difficult position of having to build up numbers again while weathering further financial constraints. The "trough" of low numbers resulting from the winding down of teacher education poses a new threat as the college struggles to re-establish itself.

Since staffing has had to be reduced, to maintain a realistic student/lecturer ratio while diversified courses were approved and subsequently launched, expansion to the point envisaged in the college's survival plan will be almost impossible while the Government's policy of level funding continues. Although the present complement of 550 students should be increased in time, the peak of 845 is unlikely to be reached again.

Rolle is a classic example of the 1960s boom in teacher training, having been founded in 1948 as an emergency college in the days of two-year courses. Most of the buildings are modern and relatively spacious but the copper roofing in several hours witness to their approval in a different era of public expenditure. Situated a stone's from the seafront of a South Devon holiday resort, its attractions for all types of student are obvious, particularly now that it offers accommodation for more than half of its students.

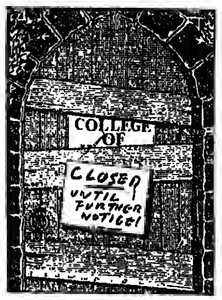
The annual intake of student teachers once reached 280 and there is still no difficulty in filling the 70-80 initial teacher training places on offer. No hint of the traumas to come preceded the placing of Rolle on Mrs Williams's list and, while there is still a cautionary note in any predictions of the future of the college, morale appears to have survived surprisingly well.

Indeed, there is an almost hinsd air about some staff when potential threats to Rolle's long-term existence are raised. It would not be surprising if there was a general feeling that the college had survived the worst that government could propose and would now muddle through the 1980s. Although it is accepted that the times are still dangerous for the colleges, there was little apparent anxiety among most staff when the Devon education committee was engaged in trying to save £500,000 as a result of the capping of the pool.

The college has been fortunate in its relations not only with the local authority, but also with the local population and Exeter University, which is now its validating body. Rolle, though only a small institution in national terms, is Exmouth's biggest employer and an important source of trade expecially during the Winter months. There is little sign of the traditional town/gown friction and the introduction of a number of overseas students has been as easily accepted that several spent Christmas Day with local families.

The university school of education, which as St Luke's College

The little Devon college is a classic example of the 1960s boom in teacher training.



ance came close to merging with Rolle, now shares a common BEd syllabus with both Rolle and the College of St Mark and St John. Their traditionally different specialisms ensure that the three institutions compliment each other, rather than conflicting, and their increasing difficulty in finding places for students' teaching practice is due more to the contracting network of rural schools than a surfeit of training.

Rolle, with its expertise in the training of primary school teachers (traditionally women students), foresees a rising demand for its BEd graduates despite current problems in recruiting applicants who meet the new, stricter entry requirements. Science subjects, though a priority at the college, are suffering particularly, in line with national trends, and some courses are only rendered viable by the presence of overseas students.

Overseas students from a range of countries, notably Kenya and Botswana, now occupy a number of the places left vacant as teacher education numbers have declined. Mr Cammaerts, whose initiative was largely responsible for the introduction of foreign students, is anxious to keep the international flavour of the college both for financial reasons and for their contribution to the intellectual life of the institution. It has grown into a two-way process with students from Rolle participating in exchange schemes with North American universities and taking short courses on the continent.

Ironically, the college's great success story of the moment—that of inservice courses for teachers—seems likely to run into staffing problems. A BEd degree for serving teachers, which is run from five centres in Devon, Cornwall and Somerset, has been so successful that four new members of staff could be justified to cope with the second and third years of the course. With short courses also run for primary teachers in the region, there seems no way that the immediate demand can be met. Only by juggling with the existing staff establishment will even the BEd be able to function properly.

However, such flexibility has been the hallmark of the college since diversification began. Staff have been prepared to give up considerable amounts of time for the inservice degree and to retrain where appropriate. The college and the local authority, for their part, have been farsighted in their operation of a staff development scheme. Again at the instigation of Mr Cammaerts, normal staffing ratios were waived so that a self-financing scheme could be introduced, allowing each academic one year off in 10 for study leave. Six or seven lecturers at a time have taken advantage of the scheme to upgrade their qualifications or retrain to meet the demands of the new college structure, so that now three quarters of the staff have benefited.

The scheme, more ambitious than that in almost any other comparable institution, has done more than anything to enable the college to construct a viable programme of diversified courses with the confidence of the university.

The strength of the structure at present is in its interdependence, but herein also lie possible danger signals for the future. The staff establishment is kept up by teaching on various different courses; full time education numbers are supported by the growing demand for in-service training; and overseas students prop up certain courses, particularly in the physical sciences. The collapse of one element might produce a decline effect, endangering the whole.

If future national policies allow the college to carry through their plans for a viable programme of diversified courses, prospects for Rolle would appear to be good enough at least in the medium term. Undoubtedly the college serves a genuine need in the area and provides its service economically. Mr Cammaerts foresees a time when government will have to decide whether small colleges figure in the future scheme of higher education, but the threat which hung over Rolle three years ago is not expected to reappear as long as the college is given a fair opportunity to make its mark.

Fabian journal reaches golden jubilee crossroads

The jubilee of a respected organ of the British political establishment entails celebration. *Political Quarterly*, founded in 1930, is celebrating its half-century. Its parliamentary friends mounted a reception in the House of Commons, the other week. The current issue contains suitably self-congratulatory essays. But something is not quite right.

The problem is not circulation. *Political Quarterly* regularly sells 4,000 copies to urban academics, literate MPs, higher civil servants and Home Office leader writers; the bulk goes to libraries. *Political Quarterly* publishing company does not take profits; but the commercial managers of the journal manage to turn a small annual sum. They are a subsidiary of the Thomson Organisation — which makes *Political Quarterly* and *The THES* sort of bastard half-kin.

The journal does not want for contributors. Its editors, Professor Bernard Crick of London University and Mr David Watt, the former journalist who now heads Chatham House, the Royal Institute of International Affairs, get mailbags of unsolicited articles. Their authors, mainly academic, are certainly not in it for the money: £45 a time.

Political Quarterly offers them something that newspapers, even the literary weeklies, cannot: give-away academic journals despite—political opinion.

Political Quarterly prides itself on its prose. Alas, too many would-be contributors cannot write good English, preferring instead the impenetrable sociological/scientific jargon which goes down well in the American *Political Science Review*. But they are happy when they get published.

For *Political Quarterly* is an economically respectable place to park their political analyses.

No, the magazine's troubles are neither money nor volume of contributions. They are—dare we say it—spiritual. The journal's tradition of 50 years is left of centre, social-democratic, administrative, Fabian, terribly sensible and dispassionate—and now faintly boring. The line from Sidney Webb, founder of the London School of Economics into post-war reconstruction, 1950s ameliorism and 1960s good governance seems to have run its course. *Political Quarterly* seems a lost duty, its circle of upland moors like social democrat a bit too taken with the sound of self-applause. The current issue of the journal gives warning that the *Political Quarterly* tradition has well nigh petered out.

The journal has prided itself on making trenchant interventions in debates about British politics. Now the tone is confused. The journal's founder is the distinguished London University economic, now long retired from active service, Professor William Robson (pronounced Robson). Professor Robson is hurt and puzzled, to judge from his essay which opens the January-March issue, by the fact that all the great progress made in social and economic life in Britain since 1945 somehow has not registered with its people.

They are still envious and discontented, the elite lacks civility and the trade unions are bolshy. With genteel despair, Professor Robson, a lifelong socialist, hints that the behaviour of the trade unions during the 1978-79 winter of discontent required all honest men to vote Conservative, is the *Political Quarterly*, faithful friend of Tony Crosland, to become Conservative?

At least, says Donald Watt of the London School of Economics in another essay, the Tories have ever been more alive than the Socialists to the menace of Soviet expansionism. Directly addressing the readers of *Political Quarterly*, he says: you have been blind. The social-democratic tradition has not equipped you to live comfortably with the diplomacy of the 1980s.

Yet more evidence of floundering comes from the essay contributed to the celebratory issue by Professor Brian Abel-Smith, also of the London School of Economics. Inside this Political Quarterly has always been firmly based in the metropolis). No backsliding or Toryism for Professor Abel-Smith. The path forward, he says, is yet more Government intervention, more Fabianism, more bureaucracy, and no truck with markets, incentives and individual choices. If the recipe did one week before, that was because we had insufficient welfare socialism.

Woe stresses from the pen of Professor Crick in his essay. Beating his breast, he wonders if the Political Quarterly's tradition has not perhaps been wrong all along—and he has been editing the journal for over 13 years.

His essay illustrates well *Political Quarterly's* malaise. Professor Crick seems to be addressing a band of brothers; united on fundamentals. But the intellectual unity of Labourism or social democracy is in tatters; Professor Crick's very able former co-editor Professor John Macdiarmid MP is sadly dead.

I went to ask Professor Crick at Birkbeck College in Central London if this miscarriage of *Political Quarterly's* debility was correct. Yes: "Consensus politics" he replied, "are breaking down. Most of the contributions that come into the journal are limited to the centre spectrum of British politics; it's narrowing. They're very dull. The Fabian tradition is exhausted. There is definitely tension in the traditions of the journal."

In other words, *Political Quarterly* in 1980 is at the crossroads, and facing a more significant choice than that of replacing Jim Callaghan by Denis Healey as leader of the Labour Party. Professor Crick wants more full-blooded Socialist speculation, for a renewal of the socialist credo.

THE POLITICAL QUARTERLY

At the end of his essay in the journal he says: "Socialists must carry a testimony that some better, more fraternal and cooperative type of human relations is possible. Otherwise, what does it matter who can manage the declining economy better?"

What this means is opening up *Political Quarterly* to the farther left. Provided they slough off their marxist jargon, several of the *New Left Review's* contributors would be welcome: Raymond Williams, Stuart Hall, Ralph Miliband and John Savile. For a journal that, at its best, embodies "civilized middle-range civic discourse", marxists would be quite a change.

And if the mixture came, *Political Quarterly* would probably lose contact with practising politicians. Even though Fabian in tone, the journal still manages to attract both Tory contributors (though few to the right of Mr Bill Deedes of the *Daily Telegraph*) and Tory readers. Sir Keith Joseph, Mr Ted Heath and Mr Patrick Jenkin are among its fans. If it lost touch with parliamentary politics, *Political Quarterly* would lose a large element of what distinguishes it from the plethora of extremely dry journals of political science and public administration.

But *Political Quarterly* is unlikely in swing left. It has missed the radical Right's beat, failed to grasp whatever its rings of pro-market Liberalism there have been in recent years (though it is noteworthy that *Political Quarterly* accepted the impeccable credentials of Mr Arthur Seldon in his recent article in *The THES*). But *Political Quarterly* has another choice. Its founding fathers included J. M. Keynes, Ernest Barker, C. P. Scott; they were liberals who believed in an alternative to both Labour and Conservatism. Could the *Political Quarterly* regain its lost vitality by running up the flag of a new centre party?

In the current issue, Professor David Marquand, of Salford University, the former politician, casts his eyes to the masthead, but cannot quite bring himself to declare in favour of a new alliance of disaffected right-wing Labourites, Liberals and Butskellite Tories. "It is a moot point", he says, "whether (the British disease) can best be cured by reforming the established parties from within or by creating a new social-democratic party of the radical Centre." A moot point, but one which he editorial board of *Political Quarterly* is going to have to settle if this excellent journal is to survive another 50 years.

David Walker

The Sheffield steel at the core of the AUT's modern structure

Ngaio Crequer on the early struggle by lecturers for a living wage

In 1919 a certain Mr Rudmuse-Brown lately resigned from the Admiralty, where he had achieved the rank of captain, wrote to the vice-chancellor of Sheffield University, to which he had now returned, to ask for an immediate increase in salary.

"On my return I find it practically impossible to maintain my house and support my family at my prewar salary (£300), which has never been raised since my appointment 10 years ago."

Unfortunately one cannot comfort the reader with an assurance that sh ples or later once were successful, as the archives at the university do not contain the replies.

But there is other evidence at least that the vice-chancellor, Dr W. Ripper, was sympathetic. In September of the same year, Professor J. A. Green, of the department of education, wrote concerning a Mr Vickers who had accepted a post at Nottingham which offered him £300 a year, compared with Sheffield's £200.

Professor Green wrote to the vice-chancellor: ". . . it is hopeless to attempt to look for a successor at the salary we are paying him. I am distressed beyond measure at the prospect of losing both my men in the coming session with all the new work that is likely to fall upon us. Can you advise me?"

The vice-chancellor wrote his own postscript on the bottom of the letter. "I telegraphed from Fafmouth (where he was presumably on holiday): 'Offer Vickers £300 to stay with us.' Ripper."

Mr B. H. Bentley eventually got a rise of £50 to take him to £350 a year, well below some of his colleagues, despite having given 23 years of service and being a head of department.

Professors' and lecturers' salaries varied greatly, not only between each other, but between different universities. Nevertheless the methods of payments had at least moved on from the former system, which consisted of a stipend plus a percentage of the students' fees.

In 1905 the then principal of Sheffield wrote to neighbouring universities to discover what staff were paid. The survey reveals that at Liverpool a mathematics professor was paid a salary of £375 plus two-thirds of students' fees, at Leeds his equivalent got £700, at Birmingham £650, at the Durham College of Science £500, at University College, Bristol, £265 plus one-quarter of the fees, at Nottingham £400 plus £250 from fees and at Manchester £430 plus two-thirds of fees.

The correspondence shows that vice-chancellors were themselves anxious to find a system of payment which would reduce the differences between salaries, to prevent jealousies and make it all less haphazard. And they began to be aware of isolated moves by staff to form themselves into associations.

In February, 1918, Dr Ripper replied to a letter from Professor C. M. Gillespie of Leeds which had noted a move for the establishment of a University Lecturers' Association.

Dr Ripper said he knew of an similar move at Sheffield although he thought that such an association was inevitable. ". . . For my own part however I should deprecate the idea that the first business of such an association is the subject of salaries. I am afraid this would give it the character of a trade union and I think that the salary question can be dealt with by united representation apart altogether from the formation of an association.

"There is a united desire on the part of everybody concerned to improve the financial position of university staffs and it seems likely that the Board of Education will require universities to pay adequate salaries to competent men without the need of trade union pressure behind the movement."

But he goes on to say that there is room for an association of lecturers to join the Senate, the organization of the professors, for the purpose of discussing university matters and promoting the welfare of the university.

It did not take Sheffield staff long to catch up with their neighbours. According to an extract from the university's finance committee minutes, March, 1919, a letter was received from the Lecturers' Society. The terms of the letter are not made clear but it was resolved that it would be considered as soon as the Government "replied as to the amount of grant to be made to the university for the purposes of increasing salaries of staff."

In fact a Conference of University Lecturers, which was to lead to the establishment of the Association of University Teachers (AUT) in June, 1919, first met in Liverpool in 1917. Its early tasks were to draw up a salary scale and to ask the universities to confer with their non-professorial staff about the levels.

A proof describing the work and aims of the AUT mentioned those subjects which demanded coordinated thought and discussion. These were the autonomy of the universities, adult education, extra-mural teaching, the relation between universities and industries and the methods of teaching.

The Association is also concerned that university teachers should have the same superannuation benefits as school-teachers. Apart from other reasons, the lack of a good scheme prevented migration from one service to another. In 1918 vice-chancellors had been concerned that the overall financial status of teachers in technical and secondary schools made their positions more attractive.

In 1920 the AUT wrote to all vice chancellors bringing to their notice its resolutions, one of which was a scale of salaries, with three grades for non-professorial staff, and recommending a minimum salary for professors.

They also say it should be recognised that university teaching should offer a career apart from the prospect of promotion to a chair. Further salaries should be comparable with those in industry and commerce, especially as the universities were losing men of scientific attainments to industrial organisations.

In 1920 W. H. Hadow, the new vice-chancellor at Sheffield held a meeting with a staff committee and it was agreed that an AUT salary scale would be adopted, with possible slight modification, as an ideal to be aimed at. He said he was entirely sympathetic to any scheme for raising salaries to an adequate level. But the problem was that such a scheme would have to be agreed by the Privy Council.

He wrote to Dr Ripper to say that almost all salaries were too low, some much too low and they should be raised both because of university policy and to show fair dealing. He did not like the system of sporadic applications; there should be a scheme, publicly announced, with periodic reviews.

That year there was a conference of the Council of the AUT with the heads of University Institutions and non-academic members of university governing bodies. From the early meetings of the AUT, many of its representatives were senior staff of the universities, including vice-chancellors and registrars.

The Sheffield archives show a spirit of great cooperation between the university establishment and the AUT which continued for a number of years.

The question of salaries was the abiding problem. At the above conference vice-chancellors pointed out their strong support for the AUT scales although their problem was finding a means of paying them.

One principal suggested that fees might have to go up a little but said it would be a disaster if the universities were captured by "well-to-do". But a motion was put recommending the raising of fees by at least 25 per cent.

In February 1922 the University Grants Committee had said it had evidence that some academic staff were living in circumstances quite incompatible with a continued efficiency, a large number of them were compelled to seek outside work.

In its Bulletin of November 1922, reflecting on a reduction of 20 per cent in the Government grant to the universities, the AUT states ". . . we have to admit the obvious apathy of the last Government in their attitude to university education, an apathy that was born not in Government offices, but was a reflection of a widespread disbelief in education held by many who were for the moment in a position of influence and power. In spite of the most categorical assurances that alone would be given in the House of Commons for a discussion of the proposed reduction of twenty per cent, in lieu thereof to Universities, the reduced vote was passed through the House in a heavy-handed complexity of Treasury estimates, and an opportunity for discussion arose. The Association of University Teachers made every effort to secure a discussion; stronger forces combined to avert it. It is not easy to write dispassionately of what appears to constitute a breach of faith; but the incident is now closed, the A.U.T. has gained political wisdom, and the Government which was responsible has gone into the wilderness.

It might be argued from such a survey of recent happenings that the Universities must put their faith not in State grants but in phone-hooks of millionaires. It is an encouraging fact that Nottingham has received £150,000 and a magnificent site from Sir Jesse Boot, and a further £100,000 from an anonymous donor. These are strange times . . .

THE UNIVERSITY BULLETIN.

Issued by the Association of University Teachers

Vol. 2., No. 1. November, 1922.

THE OUTLOOK.

The present moment is one of peculiar difficulty in educational affairs. On the one hand there are signs of unrest and encouraging interest in the problems of education, and also clear signs of vitality along many channels of educational advance; on the other there are perhaps clear signs of determined and willful obstruction. On the one side we have a beneficiary in the first Midland University, one of the healthy infants of the new-born Exeter University College, of Reading's determination to secure a Charter, of half-a-dozen University appeals to the public—signs, all of them, of courageous faith and high endeavour. Nor let remarkable is the fidelity that Lord Haldane continues to devote to his self-imposed task of impressing upon the nation the importance of adult education, a message which he has carried to every corner of the land, and which seems to find in every place a ready mind. Yet, on the other side, we have to admit the obvious apathy of the last Government in their attitude to University education, an apathy that was born not in Government offices, but was a reflection of a widespread disbelief in education held by many who were for the moment in a position of influence and power. In spite of the most categorical assurances that alone would be given in the House of Commons for a discussion of the proposed reduction of twenty per cent. in lieu thereof to Universities, the reduced vote was passed through the House in a heavy-handed complexity of Treasury estimates, and an opportunity for discussion arose. The Association of University Teachers made every effort to secure a discussion; stronger forces combined to avert it. It is not easy to write dispassionately of what appears to constitute a breach of faith; but the incident is now closed, the A.U.T. has gained political wisdom, and the Government which was responsible has gone into the wilderness.

OU's Third World arm faces amputation

David Seligman (third from left), a former OU/BBC consultant to the CICS, with participants in a distance learning workshop in Quito in October, 1978.

The substantial contribution of the Open University to the educational development of Third World countries is being seriously jeopardized by the demise of its Centre for International Cooperation and Services next month.

The centre, which was set up three years ago to expand the work of the university's overseas consultancy service, has failed to cover its costs.

Although the OU has promised to maintain a less costly mechanism, it will be forced to make a drastic cutback in its extensive programme of consultancy advice, workshops and information exchange.

This inevitable reduction in service will have widespread consequences in a number of countries which have relied heavily on the assistance of the centre's staff in setting up their own distance learning systems.

The growing dependence of developing countries on the expertise of the OU has been evident ever since the university was founded in 1969. Within a very short time its rapid growth and evident success attracted worldwide interest and this was followed by a flood of requests for practical help.

Special interest has been generated in the Third World where rapidly increasing populations, rising human expectations and aspirations have resulted in a stream of students but a shortage of teachers, money and facilities.

But although every British university is expected to involve itself to some extent in international affairs, the OU found it was completely unprepared for the flood of demands which turned out to be far beyond expectation.

No resources had been allocated by the Government to enable the OU to respond to these requests for help, not even to cope with the stream of overseas visitors—soon to number 1,000 a year—who began to turn up at the Milton Keynes campus.

Eventually in 1973 steps were taken to set up a small experimental consultancy service as a fee-earning enterprise which would coordinate responses to requests for advice and assistance. Simultaneously an academic office for the OU was opened in the United States.

The man chosen to open the American office and subsequently head the consultancy service was Professor Michael Noll, who holds a chair in applied educational sciences in the OU's institute of educational technology.

Initially the only full-time member of the service's staff, he acted as a form of broker between overseas institutions and aid agencies, and academics within the university who had specific expertise.

Altogether over a three year period the service organized more than 70 projects involving some 100 Open University staff working on assignments in 14 countries and participating in courses at Milton Keynes for another 18.

The sort of request received was usually specifically concerned with advice on planning and implementing the distance learning systems. The first contract received concerned the Free University of Iran, which was financed by the Iranian government. Help, advice and know-how was supplied over two years for a cost of about £140,000.

Subsequently the service helped set up Allama Iqbal Open University in Pakistan and was involved in projects in Israel, Kenya, Sri Lanka, Colombia, Costa Rica and Venezuela.

As the main DES grant to the OU could not be used for earning ventures, projects were funded either by the countries or institutions concerned or through collaborative arrangements with agencies such as Unesco, the (then) Overseas Development Ministry, the British Council and the Inter-American Development Bank.

But by 1976 it became clear that the consultancy service lacked the resources to play a fully professional role abroad. "It was not to be conceived", says Professor Noll. "We had no research and development back-up. We had no information centre where we could gather together materials. We weren't keeping ahead of the field and we weren't taking best advantage of briefing our people before we went out."

In addition the service lacked a small core of experienced fulltime staff who could respond rapidly to demand. Under these circumstances, if the service got a request for a specialist at short notice, Professor Noll would have to plead with the head of the appropriate university unit to release a member of staff.

So following the recommendations of a working group, the service was granted approval for the setting up of CICS, which was supposed to be a three year pump-priming exercise of £200,000 from the Ministry of Overseas Development. By the end of this period, the centre was expected to become financially viable.

Its main objectives were: to help the university obtain overseas contracts with developments in distance learning elsewhere as a field; to codify selected academic information in the field; and to make this generally available; to carry out practical research and development studies; and to provide for cooperation with and assistance to other institutions through courses, seminars, consultancy assignments, information exchanges and other activities.

The centre, under its director Professor Neil and deputy director Mr Tony Kaye of the Institute of educational technology, had grown to include six full-time academic staff on secondment from the social science faculty, and the institute of educational technology and science, also staff from data processing and BBC/OU production units, and a documentation officer.

The real problem is going to be making a decision on how to cope with the demands for help that will continue to pour in. It has always believed that it is unacceptable to turn away or refuse requests for international collaboration, especially when these come from developing countries.

Moreover, many OU staff believe that this sort of work can be of great value to the university both in providing innovation and stimulation within the institution.

The full extent of the loss will be known at the end of this month when a working group submits its report to the university council. Certainly whatever provision is made it can only be a step forward from the current arrangement and promote educational exchanges overseas.

Charlotte Dell

Paul Ramsden and Keith Percy on the experience of independent study

Students who prefer to go it alone

Would students in higher education benefit from being given more choice over what they learn and how they learn it? Teachers in universities and polytechnics are fond of saying that the courses they provide are intended to encourage students to think for themselves, and that learning in higher education involves students in taking more responsibility for their own studying than learning in school does.

Nevertheless, research into student experience of higher education undertaken during the past ten years suggests that many students feel they would benefit from more freedom to study independently, while there have been various attempts to provide more autonomy in learning—the development of project work in many science departments and the creation of the Open University are just two examples.

But only two institutions—Lancaster University and the North East London Polytechnic—have taken the radical step of setting up special departments in which students can decide for themselves what they want to learn.

What NELP and Lancaster offer is different; and a new book, based on data gathered from the early years of both schemes*, shows how different. Much project work and so-called independent reading in conventional higher education courses are highly structured and teacher-dependent; even in Open University courses (which typically provide for a great deal of individual study) the constraints of the learning materials, content, and assessment methods allow little independence beyond a degree of student self-pacing.

At NELP and Lancaster, since the early 1970s, some students have been able to choose what they want to learn according to their own goals and interests, and decide, to a large extent, the methods of learning they find more suitable.

The School for Independent Study at NELP was established in 1973 to run a course leading to the award of a Diploma of Higher Education, a qualification recommended by a three year pump-priming grant of £200,000 from the Ministry of Overseas Development. By the end of this period, the centre was expected to become financially viable.

Its main objectives were: to help the university obtain overseas contracts with developments in distance learning elsewhere as a field; to codify selected academic information in the field; and to make this generally available; to carry out practical research and development studies; and to provide for cooperation with and assistance to other institutions through courses, seminars, consultancy assignments, information exchanges and other activities.

The new course was piloted through the relevant polytechnic committees with the support of some of the most influential staff in the polytechnic, including the director. Entry requirements, although fairly flexible, were higher than some of the scheme's designers had hoped for, owing to the requirements of the Council for National Academic Awards.

The students who enrolled in 1974 were faced with a programme without lectures or a formal syllabus. Their work was entirely tutor-led. But the teaching methods were unexpected. Students spent the first six weeks deciding their objectives, and then signed a contract outlining what they intended to achieve in the course.

In the remainder of their two years they followed two parallel schemes of study. In central studies, they worked together in groups on projects. In the first year, these included a study of enclosed green areas in London and a trip from Inverness to Fort William by canoe.

In special interest studies, students worked individually on self-chosen topics; they were supervised by a tutor from another department in the polytechnic. Central studies work was assessed at the end of the programme by means of a specially-designed group exercise. Individual work was assessed by examining the products of the student's studies—essays might be in the form of conventional assignments, more unusually, an exhibition or a film.

The first two years were not without problems. The school, led by Tyrrell Burgess, was determined that its activities should be openly evaluated in order to improve the course. An interview study of students' and lecturers' experiences took place in 1975-76. Marked differences were revealed in the tutors' views of what the course ought to be trying to do. While some emphasized the personal development of students and rejected traditional academic criteria, others were troubled about the possibility of anti-intellectualism and felt that the academic development of students should be paramount.

These differences, which were all too clear to the students, created feelings of anxiety. Moreover, several of the students spoke of being isolated and unsure because their work did not relate to other students'. Some students were happy to accept the lack of coherence and common aims; most, although they did not want to lose the freedom of the course given by the DipHE, wanted more structure. They were especially worried about assessment. What was the standard? Which tutors "knew" it? Would they all be assessed in the same way? Would the qualification be credible in the outside world? Students also raised doubts about the usefulness of the planning exercise, which turned out to be a confusing and frustrating time for most of them.

Set against these difficulties were the achievements of the course in its first two years. The standard of work produced by many diplomates was—in the opinion of the external examiners—very high indeed. The school created a considerable esprit de corps among its members; they were conscious of being involved in a pioneering venture, and were quick to defend its value. Students interviewed at the end of the course spoke of having gained in personal awareness and of developing their ability to work independently.

If the NELP DipHE was a radical departure from conventional higher education, then so was the programme organized by the School of Independent Studies at Lancaster University. But it was not the same radicalism. The scheme had its origins in the early 1970s in the proposals of a small discussion group of Lancaster staff.

Although Lancaster offered a more flexible degree structure than the older civic universities, the group wanted to extend this by providing additional opportunities for learning in which students' study schemes were individually determined and crossed the existing divisions between courses and subjects.

The original planning group spoke of ideals of the academic community and of student-centred learning which they thought were no longer sufficiently recognized in universities. For them, an independent study scheme would go some way towards freeing university learning from the social contaminations which had followed from the rapid expansion of higher education and increasing specialization.

Unlike the NELP proposals, those at Lancaster had a difficult passage through the decision-making bodies of the university. Fears were expressed that the very structure of the university was being threatened. Many reasonable doubts were raised. Could students select their own form of assessment? Would they be employable? After many compromises, Senate in March, 1973, established the school on an experimental basis. Students were admitted only after they had completed the normal Lancaster first year, consisting of three subjects, and after a rigorous selection process in which they outlined proposals for their independent work and were attached to a director of studies.

Students worked through a scheme of study that was completely their own. It was usually based on one topic or theme—vernacular architecture, Marx and Freud, military history, for example. The theme would probably lead them into inquiry across a variety of disciplines, some of which might not be taught at the university. Some students relied entirely on their director of studies for guidance and intellectual dialogue; others would consult many staff and sit in on lectures and classes. The fruits of the students' work, presented in lieu of the final year for a classified honours degree, would be seen in several forms, e.g. as a dissertation, group of dissertations, or a series of essays.

Although independent studies only affected a small minority of students (about 1 in 8 majors in a year, but with larger numbers taking independent studies as a smaller part of their degree course), it soon proved itself. It was evidently meeting a need, and in the first year of graduates there were three first class honours degrees achieved out of a group of six students.

An interview study of the early years of students showed that they were unanimous in their agreement that independent study had been a worthwhile experience for them, increasing their motivation for study and giving them an opportunity to do original work.

But there were problems and difficulties which both staff and students perceived clearly. As at NELP, the directors of study—for whom this was a spare-time voluntary activity—had varying conceptions of what the scheme was about. Sometimes they left the students too much to their own devices, other times they intervened too frequently. A poor relationship between director of studies and student could be potentially disastrous if the two could not agree on the orientation of the work. It was difficult for students to know if they were progressing satisfactorily.

Student anxiety was caused by uncertainty about assessment procedures, and the division of work into units (necessitated by the Lancaster degree structure) was, in the view of most students and staff, unnecessarily complex. Several students spoke of being isolated from other students in the academic community. In its early years the Lancaster School had little coherence as an academic entity in its own right.

Substantial changes have taken place in independent studies at NELP and Lancaster since the evaluation work discussed above took place. At NELP, where clearer objectives and assessment criteria have been set out, much more structure has been given to the whole course. Many DipHE students now go on to a BA degree in the School, for which selection is rigorous. There is also a part-time DipHE.

At Lancaster, the number of full-time academic staff has increased, and attempts have been made to give the school more of a communal identity—for example, a school assembly meets regularly, and students meet in seminars to discuss their work with each other. More guidance to directors of study and to students, especially in assessment matters, is now offered.

Have the two experiments been a success? We think they have. Both are no longer experiments: the Lancaster School of Independent Studies has been established as permanent by the university, and the CNAA has approved the NELP DipHE for a full five-year period, and marked the permanent value of independent study by accepting the degree and part-time schemes.

In many cases the work produced at NELP and Lancaster is acknowledged to be outstanding, and students who have successfully passed through the two schemes feel that they have gained much from their experiences. Graduates in independent study are to be found in a wide range of different occupations—ranging from the police force to self-employed creative work—and many have gone on to do postgraduate research into their chosen themes. Now that the initial difficulties in the schemes have been largely overcome, we feel confident in urging that Schools of Independent Study could profitably be established elsewhere.

What lessons can be drawn from the two experiences? Firstly, they throw light on the force of radical attempts to innovate in higher education. Both schemes were subject to intense criticism and distrust from parts of their host institutions, and survived only because of a willingness from their prime movers to adapt and to compromise. Nevertheless, mistakes or over-optimistic assumptions were made in the initial planning of both, leading to hardships for some students. Such errors have been allowed to respond to informed comment—especially from its students—and has adapted accordingly.

It is clear that some students at both places coped better than others with their freedom—other institutions planning such programmes ought to bear this in mind. It also seems true that many of the philosophy and assumptions of such schemes ought to be presented to participating students and staff from the beginning, if only for them to react against, or that there is a common framework within which they can work. An almost complete lack of structure will be confusing for both staff and students.

Crucial issues for future independent study programmes are assessment and costs. At NELP and Lancaster, students were worried about standards and the form their assessments would take, and how their work compared with that of other students. To an extent, for all of them, it was the structure and anxieties of assessment which determined the experience and enjoyment of independent study. And at neither institution was there evidence of a genuine movement towards student self-assessment.

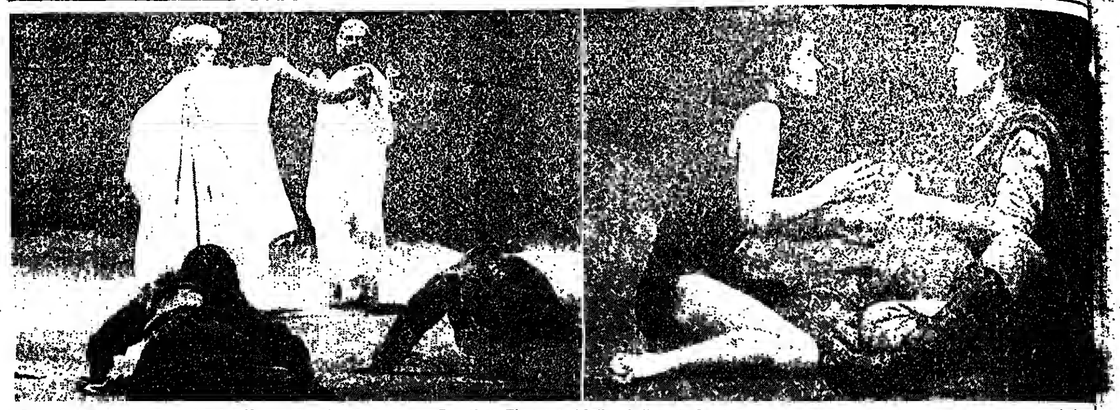
The extension of independent study programmes may prove to be limited by the costs involved: by any measurable standard, courses which involve much individual supervision will cost more than conventional ones. The problem may be solved to some extent, as it has been at Lancaster and NELP, by the voluntary, unremunerated, part-time help of members of staff from all parts of the institution.

The later developments at Lancaster and NELP suggest that there has been a movement away from the early emphasis on spontaneity and pragmatism in independent study programmes to a more overt awareness of a need for structure and common practice. Independent study has come to stay at these two institutions: the university and the polytechnic proudly point to their Schools of Independent Study as symbols of their innovatory initiative.

The problems and issues we have raised do not detract from the value of those initiatives. At the very least they have laid here some questions of effective student learning which a still expanding system of higher education has yet to confront.

* Independent Study: Two Examples from English Higher Education, by Keith Percy and Paul Ramsden, to be published this month by the Society for Research into Higher Education.

The authors are of the Institute for Research and Development in Post Compulsory Education at Lancaster University.



Janet Suzman as Helen and John Shrapnel as Apollo ... Lynn Dearth as Electra and Mike Gwilym as Orestes.

An offering fit for the gods

The clean, uncluttered, open and steeply raked stage, basically a rectangle with a circle in it that can suggest, at different times, an arena, a meeting place, a sacred grove.

John Napier has designed a set typical of RSC production methods as they have evolved over the last twenty years. So too is the bouzouki and synthesiser music that introduce the first scene, half Levantine ethnic and half pop, ancient and modern.

There was the bare stage, except for a few bushes by a golden mask of bloody Artemis mounted on a totem pole, and around sat women, with heavy, real weaving and embroidery frames—the chorus, but most cleverly broken down into, rewritten into, individual voices, some solemn in their telling of the old myths about creation and the violent history of the house of Atreus, some merry and sceptical, some puzzled. Their ensemble playing is unsurpassed and the language is clear, terse and simple. Thus overall a curious tension is created between empty space and a few rich, elaborate, heavy props (spinning wheels are spinning wheels and swords are swords) and between simple words with colloquial diction and the most heightened inner meaning.

The theme of the RSC's evolution has been "The Greeks". It is the greatest triumph of the great company in this great age of English theatrical production and acting, though mercifully not perfect. They say that it was the gods who prompted Peter Hall to bring John Barton from his fellowship at Cambridge in 1958 to Stratford in order that the Greeks would again come to life again; but the gods, both being devious in themselves and never of one mind, collaboratively, as Barton travelling even more circuitous-by-ways than Odysseus, with failures (actors rebelling against his detailed suggestions) and chimeras of successes, like his implausible "Wars of the Roses", then wrestled the hearts of men but angered the ghosts of Shakespeare to have once again so many strange words put into his mouth. Perhaps it was Shakespeare's vengeance that led to a long fallow period, with only minor productions, until now.

The plays are mainly by Euripides but with Sophocles offering *Electra* and Aeschylus *The Oresteian*—offerings to the Kolk, incidently, to be cut and reshaped, rather than to the ladle, as one could have feared, to be melted down and recast.

They are cut and reshaped for a cast of twenty to tell an essentially coherent tale, despite so many multiple plots and characters. The synopsis and cast list in the programme begins "The story so far ...". And so far as I can tell, Barton has used the knife with reverence (but to establish the tale would take a close reading of the whole work, even of the full acting text: the publicity nymph is being unusually coy in not having copies to lend).

The tale is conceived as that of the curse of the house of Atreus. Menelaus, who married Helen, and his brother Agamemnon, who is general of the host who set out to seize her back from Troy, are doomed to expiate the sin of their father Atreus in killing his brother's children, and serving them up to him as meat, in revenge for his wife's seduction. Indeed there had been a lot of that in the family, going back to the high gods themselves—Zeus ... was the original parricide.

On to this is grafted the Trojan war, rather as the wars in France come to form part of the curse of Bolingbroke. The Trojan war has its own causes: that at the wedding of Achilles' father to the nymph Thetis, the last time of the golden age when gods and men feasted and danced together, the Greeks forgot to ask the goddess of Discord. She produced *that* primal apple. But some of the chorus hint that the war was also fought for loot and slaves.

Yet the two events, the two curses, come together in Euripides's *Iphigenia in Aulis* (the last to be written, but here it begins the imposed cycle) when Artemis demands that before she will give a good wind to take the host to Troy, Agamemnon (John Shrapnel) must sacrifice his daughter, Iphigenia (Judy Buxton). The king is torn, the sense is an outrage and unnatural act, but also a consequence of the honour and justice of divine command: "Artemis does not say that I must make this sacrifice, but must *if* I want to capture Troy. ... If I refuse, I am unfit to rule, but if I do it, I shall be diminished in my humanity." In the end he declares to the "army is my master". Public opinion forces him to kill his daughter.

No Greek drama covers the saga of Troy itself. So John Barton fills the gap. I don't think Homer should say. Barton produces a good 40-minute fillet, staying close to the blind bard's original storyline. It is dramatically necessary, as is the simple language of Kenneth Cavander's actual translations.

The character of Olysseus (played by the equally experienced and wily Tony Church) gains greatly from this collegiality. Once the decision is made to fall the Greek tales of Troy, it is quite their deepest thoughts on a full modern stage, all else follows and classical scholars should rejoice at what is saved more than they may lament at what is lost. As Hecuba (Elna Ward) remarks, premonitions of sorrow always mix with the deepest of joys.

Barton makes a moving human scene of the meeting between Achilles and old Priam who has come to beg the body of his dead son for burial. They agree that they must both eat and drink something, for they have a lot of mourning ahead, which is an exhausting business. More diplomacy they tell each other is that the war is as much about "wealth and trade routes" as it is about Helen.

With so much Freud about, Barton refuses this one little Marxist hare; but it is proportionate and proper, and some of the chorusses are very sceptical. The Greeks were debating the existence of the gods, or whether it was all bilge chance, or perhaps some other kind of necessity. One of the chorus even thinks that men invent the gods to justify their own worst passions.

Back to the real texts with *Trojan Women* that ends the first night (or morning) of "The War", and with *Hecuba* that begins the second night's (or afternoon's) plays called "The Murderers". The suffering of women from war and their greater common sense about the whole masculine folly of war is unfolded. Again this is not all the modern producer—the best parts in these plays are the women's. While the Greeks held women to be chattels, they did speculate what it would be like if they acted as men, and they were both frightened and fascinated at such thoughts.

Bernard Crick reviews the Royal Shakespeare Company's marathon production of 10 plays, The Greeks, at the Aldwych. The plays, which are presented as a trilogy, are produced by John Barton. The complete cycle can either be seen during the course of three evenings or in its entirety on one day.

The enslavement of the Trojan women and the killing of their sons, is help up by Euripides as a reproach to the honour and justice of the Hellenes. "A man needs a heart of stone for this kind of work", says the Greek herald, "I think too easily and grow ashamed". The modern producer points up this embarrassment as a universal symbol of the position of women—fair enough, if we think of all.

"The Murderers", carries the tale through the killing of Agamemnon by Clytemnestra in revenge for his sacrifice of their daughter, and then her death at the hands of her daughter Electra (Lynn Dearth—who needs to calm down a little) and her son Orestes (Mike Gwilym, who doubles nobly as Achilles). The killings are off-stage, as with the Greeks, but the RSC backstage mech can do more to mutilate a wrecked or a life-size rag doll than they can by daubing a living actor with plastic scars and emulsion blood —so ghastly bodies are dragged back on stage.

Some do not like it. But I think it is right. The horror of violent death did strike home. Alas, mere words can no longer do so. In our age (though like the Athenian fifth century in some ways, so much violence and knowledge but so much violence and contempt for life), visual images are needed to remind us that it is not all play. As we think (or fear to think), so we act or so we tolerate injustice and atrocities. This middle section is moving almost beyond bearing.

"The city is dead, it is gone", weep the Trojan women amid corpses and broken statues. When they move together, there is the music of steel rattling on chains around their ankles. The only consolation that Queen Hecuba can find for her women is that "Troy was not meant to last. If we had not died, struggled and suffered, who would have remembered us?". Two views of polity are just beneath the surface of these plays. The one is that debate is better than war and that such clubs of citizens are meant to last (but contingently do not) and the other is that no city, however powerful or just, is meant to last, but that just actions and courage for justice are remembered and memory is our only personal immortality and our only collective comfort.

The third cycle, the third evening or the night of the 10-hour day, is "The Gods". Here some things go badly wrong. Perhaps the ghost of Shakespeare wrecked vengeance on Barton (not to be assuaged until he produces one of the major tragedies, straight).

"You've held them spellbound and serious for six hours—a little comic relief perhaps?" Now Euripides's *Helen* can be played as black comedy, but not as farce. All that slaughter in Troy for Helen, but she never went there! The gods sent a mere simulacrum with Paris and hid her away for the chastisement in Egypt.

The whole thing had been for nothing. Either men are the toys of the gods or they are being punished for pursuing honour in such despicable lengths. Yet even if Helen is to be mocked and detested, she needs a dignity commensurate with great events. Janet Suzman plays it like Offenbach rather than Euripides. She's rory, very funny (damn her) and is plainly acting under starters orders, decked out with bathing-towel and sun tan lotions. Her Clytemnestra is great acting, however, both noble and savage. (She finds it difficult to be both noble and skittish, as her old Cleopatra and this Helen should have been. They are fully typed for whom there is little modern analogy, such alarming oscillation of royal majesty and common vulgarity).

One nightmarish scene leads to another. Orestes and Electra shoot up the palace with sub-machine guns, petrol coolsters, grenades, hand belts and blue jeans or Is Binder Meinhof. Silly, silly, silly—these are not symbols of their motivations. With this mother-killing, incestuous pair, Barton has produced good enough to build on without post-Mortem? Does not Orestes say: "I feel like a man in a chariot with wild horses galloping. I know not where?" The RSC's boldness with time continually tempts them into anachronistic excesses, rather than a choice of symbols appropriate to the meaning yet drawn from any age. They can confuse the perennial with the topical.

Yet at the end, the production and the trio Iphigenia reassert themselves. Orestes hunted by the (inner) furies and Iphigenia (hidden away like Helen by the gods, never really sacrificed) are reunited in a cool, bleak land on the edge of the world. Athena intervenes. They will return to Greece with most of the curse purged by suffering. Barton's Athena tells us: "there must be balance." What about respect for law and order, master? Order, harmony and reason only come to terms in fragments." "Honour the furies, even" she says, "for if you do they will bless you: both the furies and the gods love those who are just".

Barton though general summary, though cannot find such words in any text. Better if he have ended there, however inventively, but they end with one of their (dangerously routine) ensemble celebratory dances, as if that enough. But Athena's words are effectively conveyed by Belle Whitelaw—it does end well. Perhaps the ghost of Shakespeare is still angry, sorrow", said the "but let the good prevail". Barton puts these words into the cast list in the programme. But good prevails? There is no place in either the original or Barton and Cavander's texts where good does not prevail. Political dramatic acts must be judged themselves, done for their own moment. No man or god can be sure of the consequences through time.

All minor abatements aside, will prove a landmark in theatre history. Thanks to John Barton's god-like skill, the RSC and Shakespearian conventions of staging and acting on an uncluttered stage together with their equally modern prose idioms, have found a way of presenting Greek tragedy in terms of modern theatre.

The door is opened for the renaissance of the Greek drama. Peter Hall already proposes *The Oresteia* at the National Theatre. John Barton generously recognises the first page of the programme only industrial troubles prevented that from appearing in the institutional form that it has developed in Britain—is an evolutionary dead-end rather than the final, triumphant embodiment of mankind's advance towards a more humanitarian form of social organisation.

Let me try to justify this rather large claim—with which many of my colleagues will disagree. In doing so, I would like to draw our attention to two crises. The first is what I shall call the *internal* crisis of the subject area within the uncomfortable diversparadox between the ideals and realities uncovered by the advance of knowledge about the operations of the Welfare State. The second is what I shall call the *external* crisis of the subject area: the new economic climate within which the Welfare State has operated since the mid-1970s.

The internal crisis of the subject area reflects the own institutional growth. The study of social policy, it is tempting to argue, is an industry whose output is social policies. We assume that if we increase the in-puts—if we employ more doctors, nurses, social workers or teachers—that this implies an increase in output (whether in terms of quantity or quality).

But is this really so? We do not really know, though we may suspect that the main beneficiaries may as often by the service producers as the service consumers. Added to this, we can be reasonably certain that as services grow in size and complexity, so the costs of co-ordination increase.

I would therefore suggest that we have got to think seriously about dismantling the Welfare State. By this, I do not want to imply that we abandon the policy aims which lead to its creation, but that we question its specific organisational form. Let me illustrate my point. Last year, when I was working as a specialist adviser to the expenditure committee, we looked at the cost of old people's homes. Specifically, we compared the costs in homes run by local authorities and in those run by voluntary agencies.

The cost in local authority homes was 76 per cent higher than in the other homes, and rising much faster. Now there may be a variety of explanations for this amazing difference: local authority homes may have higher standards, the old people in them may be more infirm, and there may be differences in accountancy practices. But another possible explanation may be that small organisations are more efficient—if only because they are less circumscribed by trade-union rules—in delivering social services. If that is so, then perhaps we should be thinking much more about the creation of a social market in the provision of social care.

The third item on our agenda, I would suggest, should be the relationship between publicly and privately provided social welfare. One of the most neglected areas in social policy studies is that of State regulation. Let me illustrate that point. Industry, as we all know, produces ill-health (among other things). There are industrial accidents and industrial diseases. If society is collectively concerned about this, it can react in one of two ways. It can assume responsibility directly, by providing health services and sickness, absence payments. Or it can require the industry to improve health and safety at work, and to assume financial responsibility for the consequences of accidents and disease.

So, if we assume that social policy is curiously and for the foreseeable future constrained by the inability or unwillingness of governments to raise extra finance through the tax system, one way forward might be to proceed by legislative redistribution. And this raises a further issue: what might be called the "internationalisation of social policy". Social policy, whether financed through taxation or through regulation, affects the competitive position of industry. Indeed, one of the original aims of the European Community was to harmonise the social policies of its member countries, precisely on the grounds that these affect the competitive position of industry. What Britain can do is therefore affected by what other countries do.

Reading all this, you may conclude that social policy is a very odd form of academic activity. It is clearly not a discipline in the traditional sense, with a clearly defined body of knowledge and theory.

It has rightly been called a magpie subject, in that it steals and borrows theories and techniques from other disciplines. Its areas of activity are not clearly demarcated. Indeed, the implication of what I have said is that social policy ought not be defined as a discrete, clearly delineated area—its boundaries set by the Welfare State—but that it should be seen as affected by, and in turn affecting, the political and economic structure of society.

Inevitably, therefore, we must only borrow from other disciplines but intrude on their territory. Traditionally, the study of social policy has been closely associated with sociology: indeed, historically, the development of sociology in Britain can be seen as an offshoot of concern with social policy issues. Now we are increasingly, and rightly, drawing on philosophy, political theory and political science, economics and organization theory.

Is there, then, no single organizing principle—no central intellectual paradigm—which defines the activity known as the study of social policy? If there is on answer to this question, then it is to be found—I would suggest—not so much in the area of activity, as in an academic activity. Given the economic and political constraints I have described, it has become clear that society is not going to be transformed by means of social policy: hence the widespread disillusion. So the temptation for the social theologians is to call for the political and economic transformation of society in order to create the environment in which social policy can be based on justice and equality.

As an impenitently pragmatic tinkerer, I do not share this view. I share neither the optimism of the theologians that the political and economic transformation of society will bring us to the promised land of social justice, nor their pessimism about the lack of scope for creating an acceptable society even within current constraints. The activity of studying social policy will always remain a messy business. It will always involve considerations of political and economic feasibility, of choices among many competing (and all desirable) aims of policy. Therefore, I would argue, lies its fascination. For it is an activity which calls for both imagination and self-discipline—which requires us to be novelists as well as scholars, extending society's ideas about what is desirable, as well as testing those ideas against reality.

The author is professor of social policy at Bath University. This article is based on his inaugural lecture.

The social policy man: priest or pragmatist?

Rudolf Klein demonstrates how society's academic analysts have had to take into account a new set of values

Until recently, I suppose it would have been fair to say that the study of social policy could largely be equated with the study of the Welfare State: of its gradual evolution over the past century or so and of the specific bundle of institutions and programmes which we now call the Welfare State. In other words, the study of social policy has tended to revolve around those institutions and programmes whereby society takes collective decisions about the allocation of resources according to non-market criteria.

The study of social policy also tends to have two other characteristics. First, implicit in much of the academic literature is an optimistically evolutionary view of history. The Welfare State is seen as the child of progress. The gradual, faltering steps which lead to its creation—the battles fought to bring about change, the long campaigns of persuasion—tend to be regarded as landmarks in mankind's advance towards a more civilized form of society.

Second, the academic institutionalisation of the study of social policy is largely the creation of the Welfare State. By this I mean that the rise and spread of departments of social administration and policy in universities up and down the country has coincided with the growth of the Welfare State.

All this might suggest a rather cosy, symbiotic relationship between the academic activity know as the study of social policy and the institutions of the Welfare State. It might indicate that our prime function is to train our students in the skills necessary to administer and deliver the social services: to produce, as it were, social engineers who can keep the machinery of the Welfare State running, while adapting the technology to meet changing circumstances or perhaps on occasion inventing new tools for policy makers.

This, however, is at best only a partial description of our role. The reason why the study of social policy is now at what I believe to be at a critical stage of its development is that those involved are increasingly being forced to question the own assumptions. Specifically, we are being forced to ask whether the Welfare State—as an institutional form that it has developed in Britain—is an evolutionary dead-end rather than the final, triumphant embodiment of mankind's advance towards a more humanitarian form of social organisation.

Let me try to justify this rather large claim—with which many of my colleagues will disagree. In doing so, I would like to draw our attention to two crises. The first is what I shall call the *internal* crisis of the subject area within the uncomfortable diversparadox between the ideals and realities uncovered by the advance of knowledge about the operations of the Welfare State. The second is what I shall call the *external* crisis of the subject area: the new economic climate within which the Welfare State has operated since the mid-1970s.

The internal crisis of the subject area reflects its own institutional growth. The study of social policy, it is tempting to argue, is an industry whose output is social policies. We assume that if we increase the in-puts—if we employ more doctors, nurses, social workers or teachers—that this implies an increase in output (whether in terms of quantity or quality).

But is this really so? We do not really know, though we may suspect that the main beneficiaries may as often by the service producers as the service consumers. Added to this, we can be reasonably certain that as services grow in size and complexity, so the costs of co-ordination increase.

I would therefore suggest that we have got to think seriously about dismantling the Welfare State. By this, I do not want to imply that we abandon the policy aims which lead to its creation, but that we question its specific organizational form. Let me illustrate my point. Last year, when I was working as a specialist adviser to the expenditure committee, we looked at the cost of old people's homes. Specifically, we compared the costs in homes run by local authorities and in those run by voluntary agencies.

The cost in local authority homes was 76 per cent higher than in the other homes, and rising much faster. Now there may be a variety of explanations for this amazing difference: local authority homes may have higher standards, the old people in them may be more infirm,

some inequality in return for greater economic efficiency?

So our first responsibility is to worry about the meaning of words: to avoid the slipshod use of language which tends to creep into the debates about social policy. Indeed, this is all the more important since issues of social policy are the subject of day-to-day discussion in the media and Parliament: the line between academic discourse and public debate is difficult to draw in the case of social policy precisely because we do not (fortunately) tend to use an esoteric language incomprehensible to the layman.

Our second responsibility, I would suggest, is to analyse the nature of the choices available in decisions about social policy issues. The difficulty about any concept of the "just society" is that it is multi-dimensional. For example, most discussions of social policy put a high premium on the value of democracy, as well as on the value of equality. But what if there is a collision between the two? In the case of the NHS and other social services, for example, we tend to *assume* that the objective of policy should be to achieve an equitable distribution of resources geographically according to the needs of the population. This implies strict central control over the rationing process. So we inevitably limit the scope for local decisions, and in doing so, the incentives for people to take participation in the decision-making process.

Lastly, I would argue that our responsibility is to avoid this temptation of imposing our own values. Like every other citizen, students of social policy are entitled to have their own values or political preferences, and to take part in political activities designed to bring their achievement about. But if we are concerned with the academic study of social policy, then clearly we should be equally concerned with finding out what the values of other citizens.

We know remarkably little about popular perceptions of the "just society", as distinct from prescriptive academic theories about what the "just society" ought to be. We are abysmally ignorant about what different people consider to be "fair" or "unfair"—and it may well be that the disillusionment of many academics with the achievements of the Welfare State stems from the fact that their prescriptions of fairness are at odds with popular perceptions.

This underlines a central dilemma for those involved in the academic study of social policy. Should they see themselves as social theologians upholding certain absolute values or as pragmatic tinkerers concerned with social engineering? Should they accept the limitations imposed on social policy by the economic or political structure of their society, or do they insist that there can be no compromise with their vision of the just society? Should they settle for moving towards an acceptable society, or do they campaign for the transformation of society?

These questions are now more acute than at any time in the history of social policy as an academic activity. Given the economic and political constraints I have described, it has become clear that society is not going to be transformed by means of social policy: hence the widespread disillusion. So the temptation for the social theologians is to call for the political and economic transformation of society in order to create the environment in which social policy can be based on justice and equality.

As an impenitently pragmatic tinkerer, I do not share this view. I share neither the optimism of the theologians that the political and economic transformation of society will bring us to the promised land of social justice, nor their pessimism about the lack of scope for creating an acceptable society even within current constraints. The activity of studying social policy will always remain a messy business. It will always involve considerations of political and economic feasibility, of choices among many competing (and all desirable) aims of policy. Therefore, I would argue, lies its fascination. For it is an activity which calls for both imagination and self-discipline—which requires us to be novelists as well as scholars, extending society's ideas about what is desirable, as well as testing those ideas against reality.

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BOOKS

Suffering their exile gladly

The London Yankees: portraits of American writers and artists in England 1894-1914
by Stanley Weintraub
W. H. Allen, £7.95
ISBN 0 491 02209 3

There are historical grounds for seeing a period of expatriation as indispensable to American literary excellence. The statement is easy to make, the reasons are less easy to define in terms other than the unacceptably simplistic, and the first steps towards a full understanding of the phenomenon require reconnaissance of its nature and its extent by the literary historian. In recent years much useful descriptive work has been done in this area and Stanley Weintraub now directs our attention to a period that has been less fully (and less sentimentally) documented than the generation of the 1920s which, if it was ever really lost, has been altogether too successfully and too exhaustively refound. The number of major American writers, as well as minor ones, who, in the 20 years immediately preceding the First World War, spent some time in residence in England will probably come as a surprise to many readers, as will the ramifications of their interaction with one another that are unfolded here, and their impact on the life of literary London.

Henry James comes all too instantly and insistently to mind as the most firmly entrenched and the only one who covers the two decades, but others who spent a significant time here include Mark Twain, Bret Harte, Harold Frederic, Stephen Crane, Ezra Pound, Robert Frost, and T. S. Eliot, together with lesser figures such as Percy Craigie ("John Oliver Hobbes"), Henry Harland ("Sidney Luska"), and founder of *The Yellow Book*), Howard Sturgis, Logan Pearsall Smith, John Gould Fletcher, and many more. Add to these major artists such as Whistler, Sargent, and Epstein, as well as Edwin Abbey and Joseph Pennell, more famous in their day than now; writers such as Wyndham Lewis of *Blast* and Frank Harris, both of whom might be called, on different grounds, near-Americans; shorter term visitors from France like Henry Adams and Edith Wharton; or from America, like Amy Lowell and Conrad Aiken: small wonder that Ford Madox Ford spoke of it all as "in a sense another foreign invasion".

Only William Carlos Williams, this time going against the (expatriate) American grain, "declared himself "glad to get away" from this "intense literary atmosphere...fatiguing in the extreme. I don't know how Ezra stood it". Ezra positively thrived on it, and, with his energetic, generous, and generally perceptive promotion of his protegés and friends, seems almost to have created it. James and he, in Mr Weintraub's presentation, sit like spiders at the centres of the webs of the two decades respectively.

It is natural that the study should terminate in 1914. The American Ambassador in London probably spoke for many of his

A contemporary cartoon shows Henry James reaching out for a mythical Europe.

compatriots in saying that the war made nonsense of "the idea that we were brought up on, that Europe is the home of civilization in general", and it tested the loyalties of many of the expatriates. James was the exception in taking British nationality and was much criticized for it. Amy Lowell insisted that "England is still the mother-country of most Americans", but she thought neutrality the proper stance for Americans and joined the exodus to the United States, perhaps anticipating Henry Adams's 1915 view of that country as "so impoverished that we need every intelligence at home, instead of being wasted abroad".

Wisely Mr Weintraub extends his narrative beyond 1914 in a short rounding-off coda. Some readers might have welcomed a symmetrically-placed prologue, sketching the pattern of expatriation before the period opens, for 1894 as a starting-point seems a more arbitrary choice. In any case, he actually begins in 1896 with Mark Twain's arrival in London after his nasocbistic world lecture tour, and thus allows anyone unfamiliar with Clemens's life to assume that this was his first experience of the capital. Literary expatriation indisputably increased in the period in question, but it was by no means unprecedented in the 30 years since the Civil War, and allusion to that would have been helpful.

"*The London Yankees* is only a record of what was", its author claims, disarmingly but not inaccurately, in his preface, and a very readable and informative record it is. Its value lies less in the production of wholly new material than in the painstaking and ingenious collocation of material from a large range of sources familiar to specialists in more limited areas, and in the patterns that it discloses in this newly-woven carpet.

The subtitle indicates that its terrain is England rather than narrowly London, and one could quibble that its *dramatis personae* are not all strictly Yankees except by a definition such as Allan Nevins's "All native born Yankees of the rules of men", but the title has a promising directness that the text does not belie. There is a wealth of anecdote on a range of subjects, much of it really informative and the characters, though not, generally, irreverent, are, to by no means idealized. Stephen Crane's attempts to reconcile bohemianism with the life of a country squire

Beerbohm's "The Queue outside Mr Sargent's".

ors grotesque but not without pathos, James and Pound, centred as they are, are shown with their shortcomings as well as their strengths.

The liveliness of the writing occasionally betrays the author into inaccuracy. For example, to say that when Amy Lowell gave a dinner at the Berkeley for Pound, Hilda Doolittle, Richard Aldington, and John Gould Fletcher, "in one room she had assured all the authentic Imagists and then some" is not strictly true; F. S. Flint and T. E. Hulme were no less authentic, and Robert Frost, in a passage quoted without comment a few pages later, seems to give them pride of place. Occasional slips like this, and others such as "he would rise heaven and earth", and "transmigrated" used as a transitive verb are minor irritants in a book that in general reads very well. If it wears its scholarship lightly, the notes on its sources (by no means all of them published) leave the extent of that scholarship in no doubt.

As "a record of what was" it conveys a vivid impression of a great deal of literary ferment initiated or stirred by the Americans. If the rapidity with which a large tract of ground is covered, the number of persons involved, and the deaths of so many of them (often prematurely) within the period all combine to give a somewhat elegiac note to much of this expenditure of energy, it is an inconsistent with the ambivalence of the expatriate position. James once wrote, "The mixture of Europe and America which you see in me has proved disastrous. It has made of me a man who is neither American nor English. I have lost touch with my own people, and I live alone", and one is tempted to append the phrase of Eliot's magus: "With an alien people clutching their gods". Pound puts it with more robust stoicism: "If a man's work requires him to live in exile, let him live in exile, let him suffer (or enjoy) his exile gladly". And here we come to the crux: in what ways did these men's work require them to live in exile?

A record of what was may not have time to inquire too closely into why it was. Pound rationalizes his own case characteristically: "The only way I could educate the educable minority in the United States was to come to London", but that rather begs the question.

His claim that America "was still a colony of London so far as culture was concerned" has some validity, and these expatriates were to some respects drawn to the fountain-head, but they were drawn by different motivations, at different stages of their careers, and to different Londons. Mark Twain, aging, exhausted and bankrupt, wanted a seclusion so complete that, for as long as he could, he conducted his affairs through his London publisher rather than have his address known even to his friends, let alone to his creditors. Stephen Crane, though ostensibly on his way to a war-reporting job in Greece, was extricating himself from an embarrassing family situation over his "wife". Younger than Clemens, but in even worse health, he responded in some ways more positively to the new environment, perhaps because it was new to him. Their work did not require them to live in exile and it can be argued that the work of neither benefited significantly from it. It may be appropriate to invoke a useful distinction: that Mary McCarthy drew some years ago between exile and expatriation: the exile is more deeply committed to the idea of returning to his native land.

London and his English friends gave Mark Twain some solace in his bereavement and his anxieties but his heart was in America in 1896-97 in a way that it had not been on his earlier visits and would not be on his later. On those occasions he could relish being lionized and could, with fewer inhibitions, feed the ambivalence of his feelings about England in the social contexts that he enjoyed but which the conventions of mourning and his own state of mind denied him in the mid-1890s. The earlier visits had provided a far greater stimulus to his creativity.

Domestic circumstances affect the issue in other ways. Pound was single when he came, and he married over here; that gave him more latitude than Frost, who arrived with a family that found their sojourn far less congenial and liberating than he did. Were the tensions that this must have generated good for his poetry, or had Bret Harte may have been shrewder in keeping his wife firmly in the States with an allowance, but if his social life benefited it is by no means clear that his writing did? Publishing history, coming under consideration, too. If, as seems to have been the case with many of these expatriates, it was easier to secure publication in this country than across the Atlantic, what were the reasons for this and how beneficial was it to their work?

At any level higher than curiosity, our interest in these men is as writers. What we want to know is how their English experience was reflected in their writings and how it affected those writings. The first is the easier question to answer, but even that varies enormously from one to another. Mr James we can generalize, probably too facilely, about "the international theme". With Pound we can identify the different cultural influences to which friendship with Yeats or Hulme exposed him, we can point to poems in *Ripostes* and *Lustra*, not to mention *Hugh Selwyn Mauberley*, that he could not have written without having lived in England. Frost, on the other hand, makes so little direct use in his poetry of his experiences in England that many readers will enjoy and appreciate his poems without realizing that he ever left New England. To it enough that, to restrict to his friendship with Edward Thomas the benefit of his English years, and if so, with what accuracy can the effects of that friendship be identified in his poetry? That those years brought also an important contact with Pound complicates the question still further.

To say that *The London Yankees* stimulates these and many more such questions rather than answers them is only to recognize the justifiable limits to what can be effectively accomplished in a book of even these dimensions. In the preface Mr Weintraub suggests that "questions are answered, if only implicitly, in these pages". Hints are attempted to answer them explicitly, or to answer others that book would have lost some of its narrative thrust without a compensating gain. Some of the questions, indeed, may not be readily answerable, but they persist, and in a way they are central to the study of American literature. American writers since the early nineteenth century have been ready to disparage their country as "a colony of London" so far as culture was concerned". The relationship is more complex, more subtle, and more equivocal than that. William Dean Howells was nearer the mark when he reminded his compatriots that in 1899, were "distressed by the absenteeism of our authors" that "American literature was, in derived from the folk-lore of the Red Indians, but was . . . a creation of English literature, and was independent of our independence". Whether that final clause is meaningful or merely cryptic is open to debate, but it cries, surely, to us the issue on a more constructive footing, and is not simply an invitation to Yeats or Hulme exposed him, we can point to poems in *Ripostes* and *Lustra*, not to mention *Hugh Selwyn Mauberley*, that he could not have written without having lived in England. Frost, on the other hand, makes so little direct use in his poetry of his experiences in England that many readers will enjoy and appreciate his poems without realizing that he ever left New England. To it enough that, to restrict to his friendship with Edward Thomas the benefit of his English years, and if so, with what accuracy can the effects of that friendship be identified in his poetry? That those years brought also an important contact with Pound complicates the question still further.

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The London Yankees
by Stanley Weintraub
Harvard University Press, £10.50
ISBN 0 674 08580 9

During the past decade there has been a great upsurge of interest in bumblebee behaviour and physiology. This interest has largely been aroused by the highly original investigations of Heinrich and his colleagues into optimal foraging strategies in these fascinating insects. In this book Heinrich presents some of these recent research findings, including much of his own work. He very skilfully weaves the information around the central theme of bumblebee economics, based on energetics.

Economics is defined as the study of the acquisition, production, distribution and consumption of goods and services. Heinrich likens the bumblebee colony to a factory, developed by natural selection over eighty million years, in which those morphological, physiological and behavioural traits that promote a large net income of resources to the factory and a large output of product from the factory, have been preserved and developed. The only resource used by the factory are the nectar and pollen which the bees collect; the factory product is new drones and queens, sexual forms that enable the colony's genes to survive into the following season.

The workers of a bumblebee colony are more or less continually at work seeking resources and transporting them back to the colony. In chapters eight to eleven Heinrich describes the skilful way in which the workers utilize the best floral sources available to them in the environment, and the mechanisms whereby efficiency and energy balance are achieved. Foraging optimization involves achieving the greatest foraging profit, or quantities of nectar or pollen, for the least cost, in terms of the time and energy expended in its collection.

As social insects, living predominantly in regions of low temperature, the bumblebee owes much of its success to its ability to maintain a suitable temperature, both within its own body and within its nest. Chapters three to six are devoted to aspects of bumblebee thermoregulatory physiology. It is often said that theoretically bumblebees should be unable to fly! Heinrich explains how their adaptive thermoregulatory mechanisms enable bumblebees to fly, even at low temperatures. By "shivering" and actively retaining the metabolically produced heat, they are able to achieve a sufficiently high thoracic temperature to allow them to fly at temperatures as low as 0°C. At high air temperatures, overheating is prevented by active heat dissipating mechanisms. Their ability to generate heat also enables them to elevate their nest temperature; this allows the young to develop more quickly so that colony numbers increase rapidly during the short growing season.

This is, however, not a dry textbook on calories, conversion ratios and energy balances. Economics is simply the framework onto which Heinrich hangs the detailed observations and experiments which he and others have made on these delightful and fascinating social insects. The book is simply and clearly written, and the information should be both interesting to the layman and useful to the specialist. The text is well augmented by a number of black and white photographs and mainly simple graphs, and there are useful appendices on rearing bumblebees as well as a colour guide to field identification of North American bumblebees. The reference list, mainly to recent research literature, will enable those interested to find original research publications, and the index is comprehensive.

This is undoubtedly an invaluable addition to our literature on social insects; its novel treatment of the subject matter will I am sure stimulate many readers to further studies in this and similar fields.

Ingrid H. Williams

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Rational and progressive practice

Theory and Meaning
by David Papineau
Clarendon Press: Oxford University Press, £8.75
ISBN 0 19 824585 8

The present state of the philosophy of science could be regarded as healthy or ill, according to one's philosophical predilections. On the one hand a good deal of interesting work is being done; on the other hand there is nothing definitive and no agreement on where to go from here. A solution to this last problem will depend on where we want to go. In this book Dr Papineau indicates a route which will lead us safely between the extremes of logical positivism and historical relativism.

One of the legacies of positivism was a great view of science, which was seen as having two aspects, observational and theoretical, each with its distinctive epistemological, semantic and ontological status. Observational entities were unproblematically real and knowable, and observational language acquired meaning through the association of terms with elements of experience, theoretical terms and entities, however, were decidedly problematic. The terms acquired meaning by being in a deductive system linked to the level of observation by correspondence rules. Whether, they ran, these latter, however, seemed doubtful. At most theory appeared to have only and "instrumental" role.

This neat structure subsided fairly quickly. The distinction between observation and theory was challenged, the role and status of correspondence rules shown to be unsatisfactory, and the developing of theory deployed. These moves, together with the attack on the analytic-synthetic distinction, left positivism in ruins, unable to offer an account of science that was either historically or philosophically true.

We need shed no tears for positivism itself, yet its destruction seemed also to have demolished something indispensable: scientific objectivity, provided by the check that experience can bring to bear on theory. For the alternative view of science that grew up, associated especially with Kuhn and Feyerabend, in which a theory cannot complete with its own meanings and observations, appeared to destroy what had been taken to be the quintessential features of the scientific enterprise: objectivity, rationality, realism and progress.

In discussing these issues Dr Papineau steers a middle course. He rejects the positivist, pure, that sense (experience) creates sense (meaning), and instead puts forward an epistemological and semantic holism, together with a modified form of Lakatos's "methodology of scientific research programmes", on that progress can be retained as a standard for judging between wholes. Observation too is retained, but in a naturalized form that has no ultimate or privileged position: it is just one feature of scientific practice among many. Meanings are dependent on the totality of laws, and evidence and anomalies are related to a whole theoretical structure and not to particular parts of it. Again, it is the whole structure, and not parts of it, which is to be understood as modelling reality. In this way Dr Papineau offers an account of science as a rational and progressive practice.

This is a difficult though lucid and stimulating book. It is wide-ranging, dealing in an integrated way with not only post-positivist methodological disputes, but also many issues in the philosophies of perception, language and logic. It is fair to say that while solving some problems it raises many others and leaves plenty of room for further work. In particular, Dr Papineau's adherence to the last vestige of empiricism—that ontological structures precede discursive structures—will need further defence. But that we are directed down still open paths is not a fault but a feature of good philosophy. This book is surely a sign that philosophy of science is healthy.

Andrew Belsey

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BOOKS

Subtle process of conditioning

Pavlov
by Jeffrey A. Gray
Fontana, £1.25
ISBN 0 00 686304 X

Pavlov's contribution to psychology was twofold. He was the first to appreciate that brain mechanisms subserving behaviour could be inferred from the study of behaviour: by examining the relations between the inputs and outputs of a system, it may be possible to specify the nature of the system itself. It is ironic that this approach to explaining behaviour, which works off the psychologist from the physiologist, should have first been explicitly adopted by a physiologist.

Pavlov's other major contribution lies in the wealth of facts he provided on the learning process. It is true that he used only one learning paradigm—that of classical conditioning in which a stimulus (the conditioned stimulus) is paired with an event (the unconditioned stimulus) that already gives rise to a response (the conditioned response): the conditioned response comes to be given to the unconditioned stimulus, and the paradigm typifies the way in which emotional responses, like fear, are learned. Nevertheless, many of the principles discovered in classical conditioning apply to other forms of learning and much of the subsequent history of research on learning has until recently consisted of replicating and refining Pavlov's basic observations.

Moreover, many of the facts he discovered are surprising and by no means obvious to common sense. He showed that extinction (the waning of the conditioned response when the conditioned stimulus is repeatedly presented unaccompanied by the unconditioned stimulus) is not simply the undoing of the connexions established during learning but depends on a more active process that he termed inhibition. He discovered spontaneous recovery (the tendency for an extinguished response to recover after a lapse of time during which the unconditioned stimulus is not presented), and he discovered blocking: if a conditioned response is formed to one stimulus, and a second stimulus is presented together with the original one with the unconditioned stimulus following their joint presentation, there is little or no conditioning of this response to the second stimulus. In other words, if an animal has already learned that a stimulus signals an important event, it learns little about the connexion between that event and any additional stimulus that also predicts it. He also investigated the temporal relations that must obtain between the conditioned and the unconditioned stimuli for conditioning to occur, and he discovered and specified the characteristics of a host of other phenomena including generalization, disinhibition, external inhibition, and so on. The range of his experimental findings is staggering and the care he took to control the conditions of his experiments ensured that they were replicable.

He never succeeded, however, in putting together his major theoretical insight with his experimental results. The brain mechanisms that Pavlov himself inferred from his behavioural findings were confused, cumbersome, ad hoc, and based on a false conception of how the brain works. In justice, it should be remarked that although today all are agreed on the theoretical importance of such notions as inhibition, we still do not have a clear picture of how it works, nor is there any agreed explanation of many of Pavlov's findings, such as spontaneous recovery or disinhibition.

In *Pavlov* Jeffrey Gray gives a succinct and agreeable account both of Pavlov's experimental work and of his theorizing. The book also traces his influence on subsequent work and devotes considerable space to some recent developments which suggest that conditioning is a more subtle process than Pavlov had supposed: in particular, animals only learn about events that they are not expecting.

Although Dr Gray's account can be recommended for its clarity and accuracy, he rarely stands back to survey the general picture and it would be easy for the neophyte to lose his way in the mass of detail, even though the detail is always clearly etched. Here and there the book evokes the reader's curiosity about what sort of a man Pavlov was—he wrote, for example, "when I dissect and destroy a living animal, I hear within myself a bitter reproach that with rough and blundering hands I am crushing an incomparable artistic mechanism"—but Dr Gray fails to satisfy the reader's incipient curiosity.

Not everyone will agree with all Dr Gray's judgments: it is true that Pavlov established "a vital bridge between physiology and psychology", but Gray's claim that the two "are now almost on the point of fusion" has an odd ring at a time when many psychologists are devoting themselves to constructing abstract models of the processes underlying higher thought processes and language with little or no hope of learning about the physiological instantiation of these models. Nevertheless, Dr Gray has provided a lively and useful introduction to the work of a great scientist.

Stuart Sutherland

Stuart Sutherland is professor of experimental psychology at Sussex University.

Bumblebees as factory workers

Bumblebee Economics
by Bernard Heinrich
Harvard University Press, £10.50
ISBN 0 674 08580 9

During the past decade there has been a great upsurge of interest in bumblebee behaviour and physiology. This interest has largely been aroused by the highly original investigations of Heinrich and his colleagues into optimal foraging strategies in these fascinating insects. In this book Heinrich presents some of these recent research findings, including much of his own work. He very skilfully weaves the information around the central theme of bumblebee economics, based on energetics.

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Ingrid H. Williams

Ingrid Williams is in the department of entomology at Rothamsted Experimental Station at Harpenden.

Accessible mathematics

Hilbert's Third Problem
by V. G. Boltianskii
translated by R. A. Silverman
Wiley, £14.00
ISBN 0 470 26289 3

On August 8, 1900, Hilbert addressed the International Congress of Mathematicians on outstanding mathematical problems. He listed 23 problems to which he hoped that his colleagues would turn their attentions in the following century.

Most of these problems have provided the impetus for a great deal of work in the first three quarters of the twentieth century, and some of them have led to the creation of whole new branches of mathematics. Some of them are recherché, some can be explained in simple terms, though their solution requires very advanced mathematics. Just one, the third, is completely elementary. It arises as follows: in plane geometry the formula for the area of a triangle is derived in any textbook by relating it to a square so it, and therefore any polygonal area that can be broken up into triangles, can be found without any limiting process.

In the solid geometry books it is otherwise; the volume of a pyramid has to be found by a limiting process. Hilbert asked whether this was inevitable, or just a defect of mathematical history. That the first was the case was proved before the end of 1900 by Max Dehn, but his proof was hard. Subsequent work has simplified the proof, and led to a whole new theory of when two polyhedra can be decomposed into the same set of pieces.

The present book is a triumph of exposition, as it is able to combine a complete review of the present state of the theory, obtainable, as the author says, for those actively engaged in research, with the simplicity required for non-specialized students.

C. W. Kilmister

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BOOKS

An institutionally contained chaos

A History of Sociological Analysis
edited by Tom Bottomore and Robin Nisbet
Heinemann Educational, £12.50 and £5.00
ISBN 0 435 82080 X and 82081 8

This book is bound to be a great success, so I hope I shall be forgiven for concentrating on its weaknesses, especially as they are in large measure a result of the very features that will ensure its success. Because it rather accurately reflects the condition of sociology it makes rugged, and often highly frustrating reading, and though many contributors end their chapters with a cone of uplift (we can, it is were, only go forward), the overall effect is dispiriting (but what a mess we've made of things so far). It will be read, gratefully, by many who want to know what contemporary sociology is or what is going on in one or other of the seemingly endless specialisms into which sociology has divided. But what such readers will find is that this curious, academically constructed outcome of the most reactionary and most radical responses to democracy and industrialism is most certainly not a viable autonomous discipline of thought.

The editors liken their volume to Schumpeter's *History of Economic Analysis*, hoping to have done for sociology what that work did for economics. Taken seriously, the comparison blows the gaff; there can be no history of sociological analysis because, unlike economics, sociology is not a bounded intellectual enterprise; it does not exist as the sort of entity which could have a single history. Neither an integrated range of theory, nor a shared epistemology, neither a delimited body of practical concerns nor a distinctive corpus of methods and styles of work hold it together as a discipline. It is at once the pivotal and the residual form of social curiosity—a congeries of tenuously related or unrelated efforts to resolve dilemmas of morality, knowledge and practice inherent in the modern understanding of society. Sociology is an institutionally contained chaos—though we usually refer to its "diversity" and "pluralism" of course. It is a phenomenon of history but any honest history of it can only be a record of fragmentation, discontinuity, cross-purposes and more or less unprofitable conflict. The trouble with this book is that it is for the most part rather honest.

As a result it is, to begin with, not a history. It is neither a continuous coherent narrative nor a sustained explanation of a present (or series of presents) in terms of a past (or series of pasts). The first task is done better by works such as Fletcher's *The Making of Sociology*, the second by, say, Gouldner's *The Coming Crisis of Western Sociology*. And the failure in this instance is not just an effect of the actual condition of sociological work; it is aggravated by certain editorial decisions in the design of the volume. The book would have been very much better had it been written entirely by Bottomore and Nisbet—indeed, the tension their joint contributions embody between the progressive and conservative tendencies in sociology would have made for an exciting and perhaps genuinely synthetic work. But lacking the confidence of Schumpeter and faced with the diversity (chaos) of their topic they chose to parcel the project out. And they decided to do so in precisely the way that would make the diversity most chaotic: on the basis of styles of work, schools and theoretical tendencies. Fourteen of the seventeen chapters are written by experts on or practising within such distinct tendencies. But, with a curious further lack of nerve, the editors then commissioned four chapters based on a quite different principle: not schools but problems. The outstanding quality of at least one of these chapters suggests how very much better it would have been to have organized the whole work on that basis. Such unity and continuity as there is in sociology is, a unity and continuity of problems, not of theories, perspectives, schools or methods.

So the book becomes a series of encyclopedia articles. The precarious frame constructed by Bottomore and Nisbet in their introduction fails to hold. Some of the contributions are historically oriented; others are almost entirely unhistorical. None of the authors are historians and some of their ventures into history are embarrassingly simplistic—there are things said about social life in the (pre-sociological) Middle Ages which would make a scholiast blush. Some authors merely present their field. Others subject it to a more or less trenchant critical review. No single critical perspective informs the book as a whole though. Some chapters read as apologies: Fisher and Strauss are so concerned to defend interactionism from the charge of being unable to deal with "big" issues and large-scale social relations that they virtually fail to discuss its enormous success in dealing with everyday life and the face-to-face world. Although there is sometimes repetition there is, moreover, little relation between chapters. And the repetitions can be confusing: we have at least three different accounts of Durkheim and two irreconcilable accounts of Marx.

Some chapters (presupposing ignorance) seem to be written for beginning students. Others (presupposing refined understanding) seem to be written for the authors' scholarly peers. Some define their topic in institutional terms, others in terms of the biographies of eminent individuals, yet others in terms of themes in the history of ideas. One or two are frankly banal—the most that can be said for Coleman's catalogue of the institutionalization of policy research in the United States is that it might serve to discourage those who want to see a "British Brookings". On the other hand a number are masterly digests of complex ranges of work and because they do strike the balance between presentation and appraisal will serve as corridors to the understanding of their selected style or field of work for some time. They are the references that will be used to launch those who want to know about, say, positivism, or phenomenology, or exchange theory.

And that presumably is how the book will for the most part be used; as a valuable work of reference for discrete topics rather than as an integrated history—and that is a pity. Especially as there is one chapter buried in the middle of the book which indicates superbly what a proper history of sociological analysis could be. Anyone who wants to read this book in that way should begin on page 362 with Alan Dawe's essay on "Theories of Social Action".

Partly because he was allowed to write about a problem—"the problematic of human agency"—partly because that problem is and has always been treated as of central significance for sociology, partly because Dawe himself is interested in the relationship between social action theories of human agency and other ways of theorizing the problem, and partly because he has developed a comprehensive interpretation of that relationship as a dynamic pivot of the history of sociology as a whole, this chapter transcends the volume and exacts respect for his claim that here "is the problematic around which the whole history of sociological analysis could be written". Indeed, if one were to read Dawe's chapter first almost all the chapters would to a remarkable degree assume new meaning as elaborations, specifications, exemplifications of his argument.

His thesis, familiar from earlier papers but appreciably advanced here, is centred on the pattern with which attempts to build "action" theories of human agency, emphasizing voluntarism, creativity and subjective meaning, have invariably ended by turning into their own antithesis—theories of social system constraining, or less extreme, external order, structure and objective constraint.

Conversely, theories of social system have worked their way repeatedly to a baffled rediscovery of the problem of action. Dawe sees the history of sociological analysis as a course for exhaustive working-out of the possibilities of this sad dialectic. Much of the diversity (or chaos) of what sociology has become makes sense from this point of view as an increasingly wide-ranging, and desperate, plundering out of all the available resources of western thought in attempts to escape from the repeated rediscovery of the "paradox of social action".

And of course if Dawe is right he could also be right to suggest that the history of sociological analysis is now exhausted. That having tried so many apparent ways out of the building they have constructed and having found them all illusory, sociologists should perhaps start work on a different building altogether. One of the advantages of human agency is that we don't have to be trapped by our own constructs. Personally, I am convinced by Dawe's argument that the history of sociological analysis reveals the need for a fundamental conceptual re-tooling, a break from the whole ormolity of thought described in the rest of this book. I am not persuaded that his own preferred next step, a move to what he calls "the sociology of conversation" is the most appropriate step. But at least to get into that sort of argument would be to enter a new epoch in the history of sociological analysis.

Philip Abrams

Philip Abrams is professor of sociology at Durham University.

Criminal

Inequality, Crime and Public Policy
by John Braithwaite
Routledge & Kegan Paul, £10.95
ISBN 0 7100 0323 4

John Braithwaite seeks to justify what he unashamedly calls celectmist criminology (since he advocates equilibrium reform within the capitalist system) against "the socialist critique" of Marxist criminology. Now that in its own right is perfectly reasonable, and indeed for the purpose of debate an analysis of the relationship between crime and inequality clearly articulated within an alternative ideological and theoretical framework might well be welcomed in some quarters. Unfortunately, such an analysis is still awaited.

In part one the author presents a review of theory and empirical research on the relationship between class and crime, and offers operational definitions of the concepts such as class and inequality that are to be employed in the analysis that follows. Braithwaite here draws between individual inequality which he takes to be the inequalities of wealth and power, and ecological inequality by which he means the tendency for lower class people to be segregated in slums. The concept of class in one is denoted by the position on the wealth and power continuum; that is, the lower class are those low in wealth and power whereas the middle class are those relatively high in wealth and power. In a book which purports to discuss the relationship between class, inequality and crime, with a view to policy formulation, the rather cursory consideration of key concepts, in particular the notion of power, is surely a major failing. His analysis will not satisfy those more acquainted with the literature on poverty, inequality and income distribution, particularly since he is concerned with the effects of certain egalitarian reforms on crime against persons and property.

Part two of the book examines the hypothesis that greater inequality of chances will reduce crime. He tests this hypothesis by reviewing related research literature, and by conducting a month's data analyses on the results of his empirical study of self-reported crime among a sample of 15 to 20-year-old males in Brisbane; and on the Uniform Crimes Report statistics for the United States. His major conclusion after all this is that "policies which result in fewer lower class people living in lower city areas might be promoted some efficacy for crime reduction".

Part three focuses on the question of whether policies which are directed towards equalizing wealth and power will have any value for the reduction of crime. It is in this section that the inadequacy of his earlier discussion of key concepts specifically that of power, becomes apparent. Analyses of the crimes of the lower class and white collar crime respectively, he argues, have to be informed by very different theoretical and explanatory frameworks.

Only in this way can the great racio social class bias in the distribution of crime be explained. Such a more searching analysis is needed than one which states, rather ingenuously that "too little power and wealth creates problems of living, and this produces crime of one type; too much power corrupts, and this produces crime of another type".

In his analysis Braithwaite is only concerned with the effects of egalitarian policies, loosely defined as class-mixing and equalization of wealth and power, on the reduction of crime. He is neither interested in other forms of inequality "such as in prestige or in educational opportunity", nor in the implications of his arguments for other areas of public policy. This is only possible because he employs so rowly defined, discrete, operational concepts without locating them within rigorous theoretical frameworks. This is extremely disappointing in a book which seeks to examine critically the relationship between crime and inequality and the implications for public policy.

Stewart Asquith

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Hopeful social democrat

Power—its forms, bases and uses
by Dennis Wrong
Blackwell, £12.00 and £4.50
ISBN 0 631 10601 4 and 11811 X

Dennis Wrong is among the brightest of New York's intellectual crowd. His versatility and insights became known to a wider public with his 1976 collection of essays entitled *Sceptical Sociology*, the virtues of which went beyond any narrow or dismissive scepticism. It was rooted both in scholarship and experience and was moulded by a political preference for social democracy which is increasingly chiming plain left-wing circles on Manhattan, however passé it has become for us in post-Callaghan Britain. The same qualities are evident in this new book.

From time to time it is especially useful—even for the most industrious reader of contemporary debates—to have an informed, realistic and non-comprehensive account of what social scientists have to say about power. The concept is beyond doubt a key one both for the lay and professional observers of society: what is power? who has it? what makes it just? what is it used for? Questions like these, as Wrong knows well, were raised by acute minds well before modern sociology. From Aristotle to Machiavelli and Hobbes and, of course, well beyond, there has been a multilingual flow of overlapping meanings, paralleled by moral (or authoritarian) affirmations of power's uses and concern, even hysterical concern, over its abuses. In recent decades each new trend in social science—from sociobiology to the tides lapping in from semiotics or linguistic philosophy—has contributed to the debate. My own view is that much in these latter-day debates will not survive—except as intellectual curiosities, products of the leisure of the theory classes—at best provocative, at worst obscure and perverse. Wrong surveys much of this material both ancient and modern, and the result is bound to be the startling point for further serious research—as well as forming, together with Martin's *Sociology of Power*, a focus for undergraduate study.

On the "meaning" of power Wrong votes for intentionality—for the view "that power can be validly imputed to an actor only when he produces intended and foreseen effects on others". This, of course, is linked to an emphasis on "power over" rather than "power to". Wrong is not so foolish as to ignore unintended or unpredicted outcomes, but his concluding chapter—in many ways unfinished but probably the most interesting one in the book—makes it clear that to blur these distinctions leads to an ultimate confusion of power with all things social. This evidently sets Wrong apart from the dialectical that so often invite such other wise different views on power as those found in vulgar extensions of phenomenology or Marxism. Like so many of the best among contemporary writers he is a modified Weberian—committed, as his tantalizingly brief final pages make clear, to an "organizational" model in sociology. Such a model in his case owes, I think, much to Hannah Arendt on the level of theory as well as to the empirical importance of large-scale organization on the modern world—with all its inbuilt inequalities. Wrong's celebrated involvement in the functionalist debate on stratification showed that he is far from deducted to the view that inequality is inevitable. But he recognizes the "organizational" locus of modern power and, I suppose, its usefulness. Nevertheless there is an inhuman face to such organizations; the problems posed by that face in societies, such as those of Eastern Europe (where it is, in so many senses, inescapable) are among the most serious problems of our time.

It is to Wrong's credit (and in part the result of his social democratic bias) that he does not evade this. He sees through the double-talk which views power as "institutionalized violence" and he does not beat an easy retreat into the message that "small is beautiful". Nor does he feel it necessary to slip into linguistic hog-wash or into the thin residues of a dogmatic or devious neo-Marxism. Wrong's book covers so much ground that it might seem churlish to regret what it omits. But it would have been useful to have had some discussion of the religious bases and uses of political power. After all, the Vatican is probably the oldest surviving bureaucracy—and this is also the age of the Ayatollahs.

Julius Gould

Julius Gould is professor of sociology at Nottingham University.

BOOKS

Britain's closed society

Social Mobility and Class Structure in Modern Britain
by John H. Goldthorpe, in collaboration with Catriona Llewellyn and Clive Payne
Clarendon Press: Oxford University Press, £12.00 and £4.95
ISBN 0 19 82723 91 and 82724 72

It is not often that a book on social stratification catches the attention of the press to the extent that all serious newspapers and journals devote large leading articles to it. But such has been the reception of John Goldthorpe's (and his colleagues') book, the latest in the Nuffield social mobility series. It is not difficult to see why it has evoked such interest: the lasting, if somewhat narcissistic, concern of intellectuals with their origins and the liberal concern with "equality of opportunity to be unequal", as Young so graphically put it, combine to make any sociological estimation of the degree of openness of British society an attractive proposition.

Despite its compelling title and pertinent subject matter, the quality of the book is uneven and is in some ways disappointing. It consists of nine working papers (three previously published) of differing style, concerns and levels of complexity, surrounded by two major theoretical and synthetic chapters by John Goldthorpe alone, which open and close the book. Being free of tables and tackling major issues in a schematic and summary way, these are bound to be the ones to which the non-sociological reader will turn. They will not be disappointed: they form a challenging, tightly argued section addressing a wide range of pertinent questions, chiefly concerned with the question of whether British (actually, English and Welsh) society is more "open" than heretofore.

On any account, there has been no significant reduction in class inequalities over the past few decades. The argument here turns on an important distinction, clearly made, and well-taken, between absolute and relative mobility. The former—the gross overall patterns and rates of absolute mobility—have changed, but have chiefly reflected economic expansion and consequent changes in the job structure. More jobs at the top, increasing faster than the supply of persons to fill them, will unmonitorically increase overall mobility rates. But relative mobility—the extent to which mobility occurs, viewed comparatively between classes or by reference to a standard norm—has largely remained unchanged. In relative, if not so obviously in absolute terms, the peak of the class structure (the so-called "service class") exhibits strong tendencies to immobility, and the chances of access to it have actually decreased.

The position of this "service class" is crucial in the Goldthorpe argument. This curious term, borrowed via Renner and Dahrendorf, by and large refers to "professional and managerial" groupings—those exercising authority and discretion in their jobs and accorded considerable prestige and monetary reward. It is this group's fortunes which have significantly determined the flavour of British mobility. As a class it has expanded considerably and its members have created at least the illusion of opportunity. It is highly heterogeneous and is recruited from the widest spectrum of positions. Its members use all their skills to provide advantages to their offspring and resist incomers, and, moreover, once a person has arrived in such a status, he rarely leaves it (women are not covered by the 1972 and 1974 studies on which the book is based). The "service class", then, represents a significant new social formation, a hardening of the old middle class.

What are the chances of change? Goldthorpe takes a fairly pessimistic view: "any significant reduction in the class inequalities is unlikely to be brought about through a process of class conflict" (page 271), and only "radical reformism" can bring about greater openness—a highly dubious policy in an age of economic retrenchment.

Goldthorpe argues his case persuasively and well, but it is not quite as well founded as it might appear. Much of the argument hinges on the sociological, and indeed the methodological, reality of the seven classes of the Goldthorpe scheme. What happens to the mobility hypotheses when equally attractive and arguable categorizations of occupations are used is anyone's guess, and is not discussed in the text. Second, a number of inconsistencies and shifts in emphasis and opinion are evident even within this volume (such as the restriction of "upward mobility" only to movement across the blue/white collar line in one place and its use to mean shift into any higher category in others).

More importantly, some conversions are made which lead us to question earlier work of the project. First, scales of occupational prestige and desirability—despite forming the basis of the seven classes—are now admitted to be misleading, or at least only suitable as dependent variables in studies of occupational attainment and, second, subjects' own conceptions and experiences of social mobility are now accepted as independent, if not a privileged, status in explaining mobility—a position strongly resisted in the past.

Goldthorpe rightly argues throughout the book that discussion about social mobility and social equality should not be kept separate—a position I would heartily applaud for they are inextricably interwoven. But they concern more than class formation—they also concern power, dignity and respect. The analysis presented here has much to say about the first, but little about the last two items. Yet if we are to understand trends in "openness" of British society, we need to know not only about movement between occupational groups—relative or absolute—but also about how social mobility operates in different labour markets (nation states are a statistical fiction in many significant matters, and so are fully-employed males). We shall also want to know not only how people experience social mobility, but also how they conceive of and experience class formation—independently of the account the sociologist provides for them.

Tony Coxon

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Capitalism without a face

Corporations, Classes and Capitalism
by John Scott
Hutchinson, £8.95 and £3.95
ISBN 0 09 136980 0 and 136981 9

The aim of this book is to provide the basis for a new interpretation of "industrial capitalism" which transcends the contending theories of "industrial society" and "capitalist society", two approaches which tend to ask different questions and seek out different sorts of evidence to support of their answers to them. In pursuing this purpose Scott has produced a work which will be invaluable to all concerned with the place of business enterprise in modern society.

After outlining the two theories Scott deals successively with the main problems concerning modern "capitalist" enterprises. Within the range of possibilities created by the joint stock company law, he argues that modes of control can vary from majority ownership control through minority control to management control, with control through a constellation of interests as increasingly likely where large shareholders cannot dominate a company's board, but equally have interests which cannot be ignored. Review of the statistical evidence relating to different periods over the past 50 years leads to the conclusion that there is a general transition from direct family control through a majority interest to control through a constellation of interests, but that different countries are at different points on this transition and nowhere is it complete, though most advanced in the United States.

This conclusion draws attention particularly to the growing importance of financial institutions and the role of "finance capital" in shaping strategic control, over industry. Consideration of the interlocking directorates and other relations between industrial and financial organizations, which form networks of communication and influence generally centred on banks forms the basis for arguing that large industrial corporations are now best seen as financiel not production units, and that the nature of finance capital has changed.

A proportied class can still be clearly identified and it successfully perpetuates itself. In Britain and the United States, however, and to a lesser extent in continental Europe, this perpetuation relies not on the inheritance of property rights in particular family-owned companies but on privileged access to positions of power obtained through cultural and social as well as economic inheritance. The centralization of control over capital has necessitated state intervention in the economy—to plan and to manage demand—with consequent problems for both private businesses and the state. Multinational corporations and the system of international competition which created them and which they perpetuate severely constrain any national economic planning and reinforce the technological gap between developed and underdeveloped societies.

Scott's discussion of these issues has obviously benefited from wide reading in the literature on the structure of advanced capitalist societies (both Marxist and non-Marxist) and allows a sophisticated awareness of the complexities, possibilities and limitations of particular theoretical positions. He presents his own conclusions clearly and fairly and his work is likely to be the starting point for subsequent research for some time to come. This is not here because his arguments are supported by an extensive range of references to British, American and continental European literature, and by detailed consideration of statistical evidence from many societies (USA, Britain, France, Germany, Scandinavia, Japan, Australia and Canada). This does not always make for easy reading, but will be of great value to those who wish to follow the arguments in greater detail and consult the original sources of the data.

The underlying theme of the whole book is the growing depersonalization of the social relations which are at the centre of attention, a developmental trend which the author sees as of general significance. Thus "power over corporate affairs is passing from the hands of individual persons to impersonal organizations", but "these financial companies are themselves increasingly subject to impersonal possession". The "impersonal" structure of possession has not resulted in a loss of power by wealthy persons", but "class domination takes a 'structural' form, because the transmission of social position is less and less a matter of personal inheritance and more and more a matter relating to the structure of the class as a whole." To such an argument is correct it means that "individualist" analyses of the power structure of advanced capitalist societies will inevitably be unsuccessful—and may therefore explain why the holders of power always seem so difficult to identify. If a "structuralist" analysis is needed, however, does not this raise in a new form the initial question of the relationship between modes of analysis and the answers they provide?

Richard Brown

Richard Brown is reader in sociology at Durham University.

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BOOKS

Enough rope to hang themselves

Permissiveness and Control: the fate of the sixties legislation
edited by the National Deviancy Conference
Macmillan, £12.00
ISBN 0 333 26680 3

This collection of essays, representing the Easter 1977 National Deviancy Conference, reflects on the "permissive" legislation of the 1960s, its origins and consequences, both as a general sociopolitical phenomenon and as it was enacted in the specific areas of drugs, race relations and juvenile delinquency. As befits the now self-consciously Marxist tendency of the NDC, the authors agree that the legislation was not nearly as permissive as it pretended, since it was primarily designed to serve the interests of capital at the expense of labour.

While none of the arguments presented in this collection is self-evidently implausible, by the same token, neither are they convincing, since they suffer from three basic flaws. First, they either tell us nothing that is at all new, such as Hall's revelation that the Wolfenden Report drew a distinction between morality and crime, or else they make empirical claims that are unsupported by evidence. Dorn may be correct in saying that anxiety about drug-use grew during the 1960s because this was perceived as a threat to the "reproduction of labour", and this may also have been "the period in which the 'progressive middle classes' came closest to establishing a social hegemony", as Hall would have us believe, but neither author actually establishes that either statement is true. For much of the time, one feels that the credibility for empirical statements rests either on the shared prejudices of the author and the reader, or on a hefty dose of neologisms, such as Hall's "double taxonomy" and "restructuring the moral economy", which obscure what is being asserted.

Second, causal connexions and actors' intentions are inferred on the flimsiest of grounds, so that, for example, in Clarke's discussion of the antecedents of the Children and Young Persons's Act, no direct connexion is established between the proposals contained in Fabian and Labour Party documents, which he analyses in depth, and the Bill itself. Indeed, he undermines the notion that any connexion existed, by pointing out that not only was there little that was distinctive about the proposals emanating from either source, but also that the White Paper *The Child, the Family and the Young Offender* (1965), which embodied many of these proposals was withdrawn and replaced by the much amended White Paper *Children in Trouble* (1968). This, he acknowledges, owed much more to the influence of the Home Office, on influence which goes unanalysed. If these Fabian and Labour Party proposals were "teeting out" policy, it may have been more appropriate to have concentrated on how the successful alternative was "tested out".

The intentions of policy makers are inferred on equally flimsy grounds, such as Dorn's assertion that, "in the last resort it will be the reproduction of the economic system that will occupy [control] agencies, even to the detriment of their short-term problems" without the slightest evidence that anyone in any control agency actually perceives the problems they face in these terms, let alone is occupied by these considerations. Moreover, one feels that throughout the implication is that since certain consequences did or did not follow legislation, then that legislation was designed to achieve these consequences. Thus, Lea appears to argue that since immigrants have not developed trade union militancy to any extent, race relations legislation was designed so that they would not.

Third, competing, though equally plausible, explanations are rarely considered and are certainly not disposed of. Thus, to the doctrinally uncommitted it may seem that race relations legislation reflected a balance of opposing pressures on the Government, with immigration controls designed to satisfy the racist majority, on the one hand, and anti-discrimination laws placating the liberal pressure groups, on the other. Not so, it was all a complex conspiratorial attempt to reconcile capital's need for cheap labour on the one hand, while avoiding racial conflict on the other. But Lea gives us no reason for preferring his Marxist interpretation to that of the non-Marxist alternative, and reasons are needed, since his argument leads to far more complex intellectual gymnastics than would otherwise be necessary.

These weaknesses do not result simply from poor scholarship, as the neo-sociologist might be forgiven for supposing, since all the authors show considerable ingenuity in constructing their intricate arguments. Rather it is the consequence of Marxist analysis, where the validity of an argument seems to rest entirely on whether it arrives at the ideologically proper conclusion, namely that whatever occurs serves the interests of capital. However convoluted the reasoning, or unsupported the empirical claims, or unsubstantiated the causal connexions and attributions of intention, these are of little concern provided a plausible path can be made to lead to this predetermined destination. Even when capital does not ostensibly appear to operate in its own interests, as when immigration control limited the supply of cheap immigrant labour, it can be made to do so by tortuously weaving an argument replete with references to the "contradictions" of capitalism, a theoretical device which is the irresistible capacity of transforming logical weakness from the explanation to the phenomenon being explained.

The single exception to all this is the contribution of Steven Box who, in discussing "hyperactivity" in children, alone meticulously presents the evidence for his thesis that there has been a rapid increase in the use of this diagnosis and the attendant use of drugs to control it. Where the evidence supporting his argument is lacking or is in some other way deficient, he makes this perfectly clear. He considers and then demolishes the alternative hypothesis that "hyperactivity" is in fact, a medically definable condition with physical origins and shows that it is inferred, mainly by teachers, from the child's behaviour. Having established his case, he goes on to suggest a plausible explanation for the growth of this phenomenon in both Britain and the United States. Is it purely accidental, I wonder, that most of Box's analysis owes more to the "labelling" perspective, now disowned by the NDC, reserving just a couple of pages towards the end for the obligatory Marxist speculations?

As for the rest of the volume, there is little to persuade the uncommitted that the self-proclaimed shift of the NDC from "labelling theory", upon which it was founded, to its current preoccupation with Marxism, has been other than a retrograde step. More importantly, perhaps, when sociology is under attack, now is not the time to provide our detractors with such potent ammunition to use against us.

P. A. J. Waddington

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Sociology thrust upon him

Liberalism and Sociology: L. T. Hobhouse and political argument in England 1880-1914
by Stefan Collini
Cambridge University Press, £12.00
ISBN 0 521 22304 0

Though L. T. Hobhouse has a certain assured place in the tribal history of British sociology, as the first holder (1907) of its premier chair, at the London School of Economics, his achievements do not today arouse any great enthusiasm among sociologists, for reasons which Dr Collini makes plain—though it is not his major aim to do so—in this excellent book.

Actually, the way he sets up his study, in terms of the alleged tension between an essentially individualist political theory and a social scientific enterprise predicated upon the irreducibility of the social, does rather less than justice to its full range and interest. These lie in two chief directions: as a valuable general analysis of political argument in those 30 years which saw the real divide between the social assumptions and forces of the Industrial Revolution and those of modern Britain; and as a study of a thinker who was less important as a founder of sociology than as an intellectual whose concerns were central to the public debate of those years.

Following lines in intellectual history advocated by Quentin Skinner, Collini sees it as his central task to recover and make intelligible the context of argument in which Hobhouse worked, which he does with great clarity and learning. He sets the scene with a chapter on "Individualism and Collectivism", concepts which are taken not as labels for political forces, as they have been for many of Dicey's critics, but as ideologically charged symbols which set the terms of political debate. Whereas sociology of knowledge (as exemplified in Richter's study of T. H. Green, for example) would seek to relate theories and ideas to their sources in social interests or cultural pressures, Collini is primarily interested in Hobhouse's writing as a sequence of *utterances* and elucidates its content by reference to his attempt to make a case plausible to a certain historical audience.

This focus on what he calls the "forensic resources" available to Hobhouse enables him to present a much more dynamic account of the interplay between author and milieu than is common in intellectual history. Such a style of analysis seems especially rewarding for Hobhouse's period as a radical journalist on the *Manchester Guardian* in the late 1890s, but has less to offer for his later attempts to elaborate an ethical evolutionary synthesis (where Hobhouse seems strikingly oriented to past intellectual concerns); and rather leaves aside the questions of why Hobhouse came to hold certain ethical and political aspirations and to maintain them selectively over his career.

What Hobhouse became certainly seems undetermined by his origins. The son of a clergyman, he arrived at Oxford from Marlborough already imbued with radical attitudes, which were soon given concrete shape in the collectivist circle inspired by the ideas of T. H. Green. Through this he was introduced to Toynbee Hall and the labour movement. In this early phase of his career—he was by now a Grants don—he stood close to the Webbs, drawing his social economics from their radical reworking of the theory of rent rather than from any notion of surplus value. By the late 1890s, however, his distaste for the importance and bureaucratic leanings of Fabianism turned him back to earlier liberal loyalties, even to alliance with individualist Cobdenites like John Morley, and he considered the surest touchstone of a man's political values to lie in his attitude to foreign policy.

His politics was intensely moralistic and at its core was a conception of the Common Good as the condition of individual self-fulfilment, along very Greenian lines. He advocated "collectivism" as far as he so could, through the extension of traditional (and individualist) liberal arguments. These fell somewhat short of what was required, and there was in addition the whole persuasive weight of Social Darwinism, whose political import, in its most influential forms, lay against him.

When, therefore, Hobhouse had "sociology" thrust upon him, at a time when the nature of this activity was very much up for definition, he was able to elicit it the role of providing some of the underpinning he wanted for his political philosophy, in the form of a theory of Progress. Sociology was to demonstrate the reality of ethical progress in history, the steady generalization of moral principles that would guarantee the ultimate rational harmony of individual interests. There was a double irony to this project. If there was one position against which Hobhouse's synthesis was directed it was the kind of political individualism justified by evolution advocated by Herbert Spencer; yet there was little in either the conception of sociology or even, for the most part, in his substantive sociological generalizations where Hobhouse made any significant advance upon Spencer. On the other hand, those who were Hobhouse's political allies—liberals and socialists concerned to extend effective citizenship and broaden social welfare—found little guidance in his work for the social investigation and analysis that was a requisite to their aims. This they pursued as "social science", not "sociology". If this division was comprehensible in the light of a Spencerian perspective, a man of Hobhouse's convictions might have been expected to close it; and it is a further indication of the extraordinary power of the evolutionary paradigm of social theory that he so signally failed to do so.

J. D. Y. Peel

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BOOKS

The evolutionist and the progress of liberty

Life Chances
by Ralph Dahrendorf
Weidenfeld & Nicolson £8.95.
ISBN 0 297 77682 7

Anything written by Professor Dahrendorf is well worth reading, but this book is a bit of a rag-bag. It is not quite a collection of essays, rather of short notes, of lectures given since the author's 1974 Reith Lectures (*The New Liberty*) and, as he disarmingly explains, of leftovers from a forthcoming book on modernity. That book will be one of analysis; this one he distinguishes as one of theory. Now "analysis" has been defined as what sociologists say they are doing when they cannot think of any more precise term to describe it. "Theory" is often something even vaguer. Dahrendorf is not exactly vague, and there are lots of fireworks and conclusions, but *Life Chances* does not amount to a well-focused book.

Nevertheless the first chapter, entitled "Anything New under the Sun?—on the Meaning of History and the Possibility of Progress", immediately presents what is to become the most prominent of several leitmotifs. Implicitly, sometimes explicitly, Dahrendorf is engaged in a respectful conversation with Sir Karl Popper. Unlike most sociological theorists these days, Dahrendorf is still a loyal Popperian, but he plainly shares an unease with a view of history as unplanned and therefore consisting of unstructured events with no discernible trend or direction.

Since his earliest Marx-bashing works, Popper has become an evolutionist, and Dahrendorf follows him in this explanation of new things under the sun: man's present attainment and social patterns were not present in ance with Neanderthal man. But that leaves Dahrendorf with the old problem of whether and how the results of social evolution can be judged to be or not to be instances of progress, or more specifically of "the progress of liberty".

That is where the concept of "life chances" (a term familiar from Weber's writings) comes in. From Dahrendorf's liberal standpoint, the "new things" are to be judged by their effect on individuals' life chances. There ensues a lightning tour of the problem of happiness, utility and collective welfare functions from Adam Smith and Bentham through Mill and Pareto to Robbins and contemporary economics. But Dahrendorf does not quite adopt the classic utilitarian economic axiom that any change which increases the options among which an individual can freely choose is a change for the better.

Dahrendorf identifies two components of life chances—not just options, but also "ligatures". In my opinion, sociology could have survived without yet another terminological borrowing from linguistics (or typography?). "Ligatures", Dahrendorf explains, "are allegiances; one might call them bonds or linkages as well". Ligatures and options, at least in principle, vary independently, and both are essential to happiness. "Ligatures without options are oppressive, whereas options without bonds are meaningless. Pre-modern societies with their overpowering forces of family, estate or caste, tribe, church, slavery or feudal dependence, were in some ways all linkage and no choice." Modernization, on the other hand, has too often created options through the destruction of ligatures. Which enables Dahrendorf to slot in ideas from Tocqueville and Durkheim to the contemporary sociologists, and also to have fun placing China, Brazil and West Germany in diagrams plotting the relative abundance or scarcity of ligatures and options. It does not, however, seem to me to get him much further with his problem of "the progress of liberty". Theory detached from analysis would seem to be unfruitful here.

In fact, in theorizing, Dahrendorf seems to make extraordinarily heavy work of some rather simple ideas. That social patterns develop and change constantly, largely in ways nobody has planned, through the activities of interdependent people and groups; that because many social processes are quite unplanned and unforeseen they do not necessarily lack structure and direction; that changing patterns of interdependence involve changing power balances, and new constraints as well as new options; that people's allegiances or "ligatures" are both a component of power balances and also shaped within people's relations of interdependence—but that is to raise the problem of the sociology of knowledge, of which Popper so disapproves. All these simple ideas can only be fleshed out through what Dahrendorf would regard as analysis, not theory.

Actually, many of the most interesting passages in *Life Chances* are those in which Dahrendorf the erstwhile *homme d'affaires* in Brussels makes passing comparisons between the countries of Europe and the West, and most especially between Britain and West Germany. These occur particularly in the chapters on liberalism and on "The End of the Social Democratic Consensus". Let us therefore look forward to his book on modernity, and hope that his analysis there produces a more convincing synthesis!

Stephen Mennell

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Would you answer a couple of questions?

Understanding Data: an introduction to exploratory and confirmatory data analysis
by D. H. Erickson and T. A. Nosanchuk
Open University Press, £4.95
ISBN 0 335 00252 8

Social Research: principles and procedures
edited by John Bynner and Keith M. Stribley
Longman, £5.25
ISBN 0 582 29501 7

Censuses, Surveys and Privacy
edited by Martin Bulmer
Macmillan, £15.00 and £6.95
ISBN 0 333 26222 0 and 26223 9

Despite the popularity of empirical research among British sociologists there is a continuous debate about ways in which students can best be taught to do effective research. In particular, teachers of research methodology have been concerned about teaching social statistics to non-numerate sociologists, conveying the variety of research styles available to the researcher and considering the social, ethical and political processes that surround data collection and analysis. Many standard methodology textbooks have been turgid issues packed with artificial examples. Teachers of methodology have, therefore, devoted much time to writing and editing suitable texts.

Erickson and Nosanchuk's book on exploratory and confirmatory data analysis is a statistics book specially written for social scientists. The text is based on John Tukey's work on exploratory data analysis and attempts to overcome such problems as how to analyse data, how to interpret tables, how to check results, and most importantly, how to get ideas from data. It represents the author's emphasize the degree to which understanding data is an exciting process that involves creativity and imagination.

Their book is divided into sections, ranging from basic statistics to multiple regression, and each containing a review of the work covered together with revision exercises based on real data. The book's style is clear and lively and should appeal to students. It has already found its way onto several reading lists and its publication by the Open University will inevitably bring it a wide readership.

Another teaching text is the collection of readings produced by John Bynner and Keith Stribley. The material has been brought together for the Open University course entitled "Research Methods in Education and the Social Sciences". The readings have been divided into five sections: the language of social research, research design, data collection, measurement and data analysis. Each section contains articles on three styles of social research: experimental, survey and interpretative research. The fact that the authors have selected articles that demonstrate originality, clarity and a range of research styles is to be applauded. However, much of this material is already widely available, some places having been taken from basic textbooks, while some of the articles are in other collections used by students. If the editors had provided some detailed linking commentary to set the articles in a wider context it might have given the book a use beyond the Open University course. I am sure OU students will appreciate this collection but I am dubious about how it can be used more widely.

In this instance Bynner and Stribley might turn their attention to Martin Bulmer's book as he has sought to teach them about editing. *Censuses, Surveys and Privacy* is the third set of readings on methodology he has produced, and maintains the high quality we have come to expect from him. Bulmer's lucid sections define terms, locate the readings within a specific context, raise pertinent questions and make links between the articles and between the sections. In addition, he has provided 12 pages of suggestions for further reading on privacy. This list has been carefully divided into sections and provides an indication of the more important works. Both the student of methodology and the general reader who is interested in privacy will find this book valuable.

Bulmer concentrates on "the problems which censuses and surveys pose for preserving privacy, and which privacy poses for the conduct of censuses and surveys". The material which examines quantitive research has been selected from a variety of unusually interesting sources: a British Association study group, a working party established by Social and Community Planning Research, a report from the American Statistical Association and a report from the United Kingdom Data Protection Committee. In addition, there are papers reprinted from academic journals and some original contributions.

Overall, this collection of readings raises questions which lie at the heart of all social research.

Robert Burgess

Robert Burgess lectures in sociology at the University of Warwick.

Middle-class fragmentation

Respectable Rebels: middle class campaigns in Britain in the 1970s
by Roger King and Neill Nugent
Hodder & Stoughton, £10.95 and £3.95
ISBN 0 340 23164 and 23165 3

How is it that whereas Britain is a middle-class society, organized by and very much for the middle classes, the 1970s saw the rise of a substantial number of middle-class bodies, largely operating outside institutional structures? According to the authors of this book, this is a reflection of the increasing fragmentation of the middle classes. The liberal professions, civil servant and professional employees have, indeed, little in common with the small businessman who holds traditional middle-class values. The revolt, if it can be so described, is as much against other sections of the middle-class as anyone else. The approach here underlies and makes a valuable contribution to the movement of British sociology away from rather homogeneous stereotypes of middle-class and working-class.

The authors define the middle classes in terms of attitudes rather than occupation or property relationships. Most of the groups studied are characterized by "traditional" middle-class moral and economic attitudes, but they are far from homogeneous. Some of them arose as responses to particular government policies. A new taxpayers' movement gained considerable electoral success after the high rate rises of 1974, and organizations for the self-employed arose following the imposition of VAT and increased national insurance contributions. Both these movements have tended to keep their distance from the Conservative Party. The authors show how the claim to be non-political should not always be regarded as concealed Conservatism: it may reflect, among other things, cynicism of, if not disillusionment with, both major parties. The National Federation of the Self-Employed at an early stage dissociated itself from the National Association for Freedom because of the latter's explicitly political stance. Yet if organizations for the self-employed have fairly clear economic aims and interests, this is not a reflection of homogeneity of membership. It is, as the bank shows, the enormous diversity of the self-employed population that makes their recruitment and organization difficult.

Middle class unionism is also primarily concerned with economic rather than moral or political issues. This seems to be a dubious candidate for treatment as an aspect of middle-class revolt. Yet the useful survey here does show that this, rather than representing the proletarianization of the middle classes and identification with manual workers, is often used as an instrument for maintaining differentials from manual workers. Many of these unions are not affiliated to the Labour Party, and even where they are, there is large-scale contracting out of the political levy.

The most overt defenders of "traditional" middle-class values are the "freedom" groups and the moral organizations, their aims seen as reflecting dissatisfaction with current Conservatism; with the retreat of the Conservative Party from individualism and free enterprise on the one hand, and from moral and religious values for the sake of commercialism on the other. While the National Association for Freedom (now re-named the Freedom Association to avoid any connexion with the National Front) has concerned itself mainly with attacking trade union power, both this and the National Viewers and Listeners Association have sought to appeal to all sections of society. Opposition to trade union power and to sexual permissiveness both find considerable working-class support, though this does not manifest itself in these organizations.

Overall, this is a very useful, sensitive, readable, and well-researched and documented study of these various groups, tracing their connexions with the major political parties, and the responses of the parties to them. Despite their heterogeneity and the difficulty in clearly locating the middle class, it does convey how they can be seen in relation to the spectrum of traditional middle-class attitudes. What distinguishes them from the working-class residents' associations and community action groups, from the middle-class radical groups such as the Anti-Nazi League, and from the National Front, is their respectability. But even respectability is not solely a middle-class value.

David Berry

David Berry is senior lecturer in sociology at University College, Cardiff.

NOTICE BOARD

Noticeboard is compiled by Patricia Santinelli and Mila Goldie

Chairs

Dr William Mordue, reader at Imperial College, London, has been appointed to the chair of zoology at Aberdeen. He succeeds Professor Frederick Holliday who has taken up his appointment as vice-chancellor of Durham University.

Dr John P. Renwick, currently professor of French and pro-vice-chancellor at the New University of Ulster, has been appointed to a chair of French at the University of Edinburgh with effect from October 1.

Dr Peter France, currently reader in French at Sussex University has been to a chair of French at the University of Edinburgh, with effect from October 1.

Dr David Betteridge, reader in the department of chemistry, University College, Swansea, has been granted a personal chair.

Appointments

Universities

Aberdeen

Temporary lecturers: U. J. R. Imhle, Maria Galea and T. M. Verdon (pathology). Visiting fellows: Dr Roman Gadeblewski (geography); Doc dr Hab Zygmunt Dmowski (political economy). Research fellows: Melvin Kenward (child health and mental health); Christopher B. Howard (computing centre). Research assistants: Bryan Dunbar (biochemistry); Christopher P. Mitchell (forestry); Robert H. M. Dingwall (Institute of Environmental and Offshore Medicine); George C. Law (natural philosophy); Lynne Edwards (political economy). Temporary research assistants: Derek Boyne (community medicine).

Brunel

Secretary-general: David Neave

Dundee

Careers and appointments office of the university: Miss Barbara Taylor.

Edinburgh

Chaplain. The Rev Fergus Smith.

Salford

Lecturers: R. J. Towell (modern languages); A. J. Buxton (economics); Dr C. G. Morgan (biochemistry); Dr T. W. Wallace (chemistry and applied chemistry). University engineer: A. W. W. Craig.

Heriot-Watt

Lecturer: L. J. S. Burck (petroleum engineering). Research associates: Mrs Irene Drummond, D. Duncan, Celia M. Graham (biological sciences); M. Corfield and P. Gromme (chemistry); R. S. White (electrical and electronic engineering); J. C. Foot (mechanical engineering); I. Frazer (offshore engineering); R. S. Taylor (petroleum engineering).

Edinburgh College of Art

Principal: Gavin T. N. Ross.

North Riding College of Education, Scarborough

Creative writing fellow: Susan Price.

General

Ian Anderson, formerly assistant press officer has been appointed press officer at the Schools Council.

Dinah Drook, the former press officer, is now working directly for the Schools Council Secretary on special assignments.

Mr Cedric Marshall Thomas, chairman of the Wolverhampton special programmes area board of the Manpower Services Commission, has been appointed a member of the Health and Safety Commission from January 3, 1980.

Vivien Stern, director of the National Association for the Care and Resettlement of Offenders, has been appointed to represent the interest of voluntary organization on the Manpower Services Commission's special programmes board.

Forthcoming events

"Waste is Our Fire", a spring term lecture by Jan Alper of Friends of the Earth, will be held at the Polytechnic of North London, Ladbroke House, Highbury Grove, London N5, on February 19. Admission free, without ticket.

* * *

"Rights of Women", a talk by Jenny Earle, worker with Rights of Women. One in the series of lectures on the Women's Liberation Movement will be delivered on February 18 in Room 1/1, PNL Tower Block, Holloway Road, London N7.

* * *

"Distance Learning for Technicians", a conference organized by the Society of Electronic and Radio Technicians in association with the Technician Education Council, the Council of Educational Technology, and the Manpower Services Commission is to be held at Surrey University from March 28-30. Topics for discussion will include two-way communications (tutoring, counselling and assessment). Fee: £65. Further details from Janet Firmin, 57/61 Newington Causeway, London SE1 6BL.

* * *

"Cost Benefit Analysis" (with reference to a third London Airport), a one day conference which aims to consider the contemporary role of cost benefit analysis in evaluating public investment projects, will be held in the School of Navigation, City of London Polytechnic, 100 Minories, London EC3. Conference Chairman: L. W. T. Stafford, principal lecturer in economics at the polytechnic. Fee: £30. Further details: Ellen Johnston, Short Courses coordinator, City of London Polytechnic, 84 Moorgate, London EC2M 6SQ.

* * *

"Higher Education—Crisis or Challenge?", a conference organized by the Institute of Careers Officers, will be held from April 14-17 at Lake Hall, Birmingham University. Speakers will include: Dr Patrick Nuttgens, director of Leeds Polytechnic, on "The Changing Role of Higher Education"; "Higher Education—Towards the 2000", by Dr Rhodes Boyson, secretary of state for higher education. Full fee: £80.50. Further details from Mrs Mary Parsons, general secretary, the Institute of Careers Officers, Old Board Chambers, 37a High Street, Stourbridge, West Midlands.

* * *

The British Library is holding an exhibition of letters and other documents relating to Sarah, Duchess of Marlborough, in the library's gallery in the British Museum until the end of April. Much of the material is selected from a large collection of letters and historical papers from Blenheim Palace recently acquired by BL.

* * *

"Leasehold Flats—Sale and Purchase", a one-day seminar aimed at the surveyor will be held at North East London Polytechnic on February 21, Forest Road, Walthamstow, London E17. Further details from Ms T. Lake, Faculty of Environmental Studies at the above address.

Grants

Dundee

Biochemical medicine—Professor P. D. Griffiths—£75,000 from the Scottish Planning Council to assist development of the laboratory computing project at Ninewells Hospital, Dundee.

Biochemistry—Professor P. B. Garland—£12,927 from the MRC to assist his research into the control of membrane biosynthesis; Dr B. A. Haddock—£20,876 from the MRC in connexion with his research into molecular basis for the regulation of the synthesis of anaerobic enzymes in escherichia coli; Dr D. G. Hardie—£25,938 from the MRC to assist his investigation of the structure and mechanism of fatty acid synthetase, a multifunctional enzyme.

Mechanical engineering—Dr P. R. Cave £15,000 from the SRC to assist his research into numerically-controlled tool part programme testing and development.

Town and regional planning—Dr Hugh Begg and Stuart McDowall, Master of St Salvator's College, University of St Andrews—£30,000 from the Secretary of State for Scotland to carry out a study on industrial performance and prospects in areas affected by oil-development.

Heriot-Watt University

Institute of Offshore Engineering—£10,000 from the BP Petroleum Development to innovate topics arising from the Institute's activities which embrace interests in marine science, environmental protection and monitoring, and measurement, safety and cost in offshore resource exploitation.

Mechanical engineering—£34,736 from the SRC for investigation into design of fluid dampers for the tube draw-benches, under the direction of R. Jones.

Chemistry and The Royal Institution, London—£35,000 from the SRC investigation into relaxation phenomena in synthetic molecules, under the direction of Professor D. Phillips (Royal Institution) and Dr I. Soutar (Heriot-Watt University).

Bradford

Computing—Dr R. J. Thomas and Dr Kirkham—£20,000 from the SRC for a project concerning a micro-computer based language for the specification of information systems requirements.

Physics—Dr D. L. Watson with SRC Daresbury laboratory—£ from the SRC for research related to software for the NSF spectrometer.

DSc: Sir George Porter, director of the Royal Institution and Fullerian professor of chemistry since 1966; John Charnley, emeritus professor of orthopaedic surgery, Manchester University.

Open University programmes February 16 to February 22

Saturday February 16

BBC 1
7.40 The pre-school child : Joining in (P912 : prog 4).
8.05 Research methods in education and the social sciences : The Research Idea (DE304 : prog 2).

BBC 2
7.40 The revolutions of 1848 : Urban insurrection (A321 : prog 1).
8.05 Twentieth century poetry : Imagery & Imagism (A306 : prog 1).
8.30* Arts foundation course : Argument on Television Programme 1 (A101 : prog 3).
8.55 Cognitive psychology : Defining the Field (D303 : prog 3).
9.20 People and work : Iron (DE351 : prog 1).
9.45 Risk : Everything you always wanted to know about "Risk" but did not dare ask (U201 : prog 1).
10.10 Elements of music : Score Reading (A241 : prog 1).
10.35 Policies, people and administration : An MP's Surgery (D336 : prog 1).
11.00 The Earth's physical resources : Resources & Reserves : Some Basic Concepts (S266 : prog 1).
11.25* Biochemistry and molecular biology : Haemoglobin (S322 : prog 1).
11.50 Consumer Decisions : Serve You Right? (P931 : prog 3).
12.15* Fundamentals of human geography : Quest for the Wilderness (D204 : prog 1).
12.40* History of architecture and design 1890-1939 : An Architect at Work (A305 : prog 1).
13.10 The sociological perspective : An introduction (D283 : prog 1).
13.35 Education and the urban environment : Tower Hamlets (E361 : prog 1).
13.05 Political economy and taxation : Expenditure Plans—A Figure with Figures : Part 1 (D323 : prog 1).
14.20 Linear mathematics : The Dimension Theorem (M201 : prog 2).
14.45* Reading development (PE231) : The reading curriculum and the advisory role (PE231) : Reading and individual development (PE231) : Beginning Reading (prog PE231/1).

RADIO 3 (VHF)
6.00 An algorithmic approach to computing : Introduction to the Course (M251 : prog 1).
6.20* Images and information : Introduction to Imaging (ST291 : prog 1).
0.40 Computing and computers : Introducing the Course (PM951 : prog 1).
7.00 Patterns of inequality : What is inequality? (D302 : prog 1).
7.20* Arts foundation course : Why We Should Reason Well (A101 : prog 2).
7.40 Mathematics foundation course : Foundation Maths 1 (M101 : prog 1).

RADIO 4 (VHF)
Not on North West Scottish or mid-Welsh transmitters
8.05 Music Fill.
8.10 Open Forum—2.
8.30 Music Fill.
8.50 Instrumentation : The Moving Coil Meter and the Pneumatic Transducer (T291 : prog 1).
10.15 Use of Libraries—3.
11.20 Economics and education policy : Economics and Policy Making (ED322 : prog 1).
11.45 Decision-making in Britain : What Kind of Society do we want? (D203 : prog 1).
14.05 Music Fill.
14.20 International politics and foreign policy : The Press and International Affairs (D332 : prog 4).
14.40 Social psychology : Researching Psychosexual Identity (D305 : prog 1).
15.00 Art and environment : The Kizaemon Ido Teabowl (TAD292 : prog 1).
15.20 Management in education : Three Levels of Management (E321 : prog 1).
15.40 Biochemistry and molecular biology : Biochemists and Biochemistry (S322 : prog 1).
16.00* The development of instruments and their music : An Introduction to the Course (A304 : prog 1).
16.20 Ecology : Looking at Rocks (S2[illegible] : prog 1).
16.40 Great Britain 1750-1950 : sources and historiography : The Process of Research : An 18th-Century Example (A401 : prog 2).
17.00* Problems of philosophy : Body and Mind : A Dialogue from Malebranche (A303 : prog 1).
17.20* Greece 478-336 BC : Greek Colonization (A292 : prog 1).
17.40 Analysis : Some Examples on Inequalities (M231 : prog 1).

RADIO 3 (VHF)
Alternative broadcasts for North Scottish and mid-Welsh transmitters
24.00* International politics and foreign policy : The Press and International Affairs (D332 : prog 4).
00.20* Art and environment : The Kizaemon Ido Teabowl (TAD292 : prog 1).
00.40* Open Forum—2.

Sunday February 17

BBC 1
7.40* History of architecture and design 1890-1939 : The Universal International Exhibition Paris 1900 (A305 : prog 2).
8.05 Analysis : Numbers (M231 : prog 1).

BBC 2
7.40 Making sense of society : Crime (D101 : prog 2).
8.05* Science foundation course : Measuring the Earth and the Moon (S101 : prog 2).
8.30 Mathematics foundation course : The Binomial Theorem (M101 : prog 2).
9.20 Images and information : Your Own Optics Laboratory (ST291 : prog 1).
9.45 The rise of modernism in music 1890-1930 : Vienna : Stripping the Facade (A308 : prog 2).
10.10* Man-made futures : design and technology : Ways of Seeing the Future (T262 : prog 1).
10.35* An introduction to the chemistry of carbon compounds : Spectroscopic Methods of Structure Determination (S24[illegible] : prog 1).
11.00 An introduction to calculus : The Binomial Theorem (MS283 : prog 2).
11.25* The First Years of Life : Clash! (P911 : prog 4).
11.50 Energy in the House : Building for the Future (PET271 : prog 3).
12.15* Telecommunication systems : Filters (T321 : prog 1).
12.40 Instrumentation : Introduction to Instrumentation (T291 : prog 1).
13.05 Materials processing : Brick by Brick (T352 : prog 1).
13.30 Control of technology : Time, Money and Technology (T361 : prog 1).
13.50 Greece 478-336 BC : Land and Sea (A292 : prog 1).
14.25 Decision-making in Britain : Concorde Case Study : The Plans from the Past (D203 : prog 1).
14.45 Man's religious quest : Pilgrimage (AD208 : prog 7).
15.10* Language development : Talking to Children (P233 : prog 1).
15.35* Great Britain 1750-1950 : sources and historiography : Landscape Maps and the Historian (A401 : prog 3).
16.00 Curriculum design and development : The Mackenzie File (E203 : prog 1).
16.25 Comparative physiology : Introduction : The Animal Kingdom (S322 : prog 1).
16.50* Political economy and taxation : Expenditure Plans—A Figure with Figures : Part 1 (D323 : prog 1).

RADIO 3 (VHF)
6.00* Oceanography : The Map of the Ocean Floor (S334 : prog 1).
6.20 Fundamentals of human geography : Dartmoor : Recreation and Farming (D204 : prog 1).
6.40 Renaissance and Reformation : The Nature of the Renaissance (A201 : prog 1).
7.00 Making sense of society : What is Crime? (D101 : prog 2).
7.20 The nature of chemistry : Extension Studies in Chemistry (S304 : prog 2).
7.40 Elements of music : An Introduction to the Elements of Music (A241 : prog 1).

RADIO 4 (VHF) : Not on North Scottish transmitters
7.15 Music Fill.
7.25* Drama : "Silence" : A Play by Harold Pinter (A307 : prog 1).
7.45* Man's religious quest : Religion as a Universal Phenomenon (AD208 : prog 1).
8.15 Fundamentals of statistical inference : Introduction to the Course (M341 : prog 1).
8.35 The sociological perspective : Novelists as Sociologists (D283 : prog 1).
8.55* Consumer decisions : Consumer Groups (P931 : prog 4).
9.15* The Pre-School Child : You Tell Us (P912 : prog 6).
9.35 Technology foundation course : Using Drawings, Models and Broadcasts (T101 : prog 2).
9.55* Conflicts and stability in the development of modern Europe c1789-1970 : Living Through A Revolution 1789-1870 (A309 : prog 1).

RADIO 3 (VHF)
24.00 Microeconomics : Microeconomics and You (D222 : prog 1).
00.20 History of architecture and design 1890-1939 : The Mansions of Decorative Art in the 1890's (A305 : prog 2).
00.40* Mass communication and society : Perceptions and Realities (DE353 : prog 1).

Monday February 18

BBC 1
6.40* Mathematics foundation course : The Binomial Theorem (M101 : prog 3).
7.05* Mass communication and society : A Mirror Held Up to Reality (DE353 : prog 1).
7.30* Decision making in Britain : Concorde Case Study : The Plans from the Past (D203 : prog 1).

BBC 2
6.40 Systems behaviour : Deep Sea Container Ports (T241 : prog 1).
7.05 Modelling by mathematics : Piecing Together a Model (TM281 : prog 1).
7.30* Technology foundation course : Seeing Through Drawings (T101 : prog 2).
15.50* Research methods in education and the social sciences : The Research Idea (DE304 : prog 2).
17.15* Renaissance and Reformation : An Introduction (A201 : prog 1).

RADIO 3 (VHF)
6.00 Schooling and society : An Introduction to Schooling and Society (E202 : prog 1).
6.20 The revolutions of 1848 : Talking About Revolution (A321 : prog 1).
6.40 Thought and reality : central themes in Wittgenstein's philosophy : Thought and Reality (A402 : prog 1).
18.20 Man's religious quest : The Student of Religion (AD208 : prog 4).
18.40 Arts foundation course : Doing History : Radio History : An Exercise in Constructive Criticism (A101 : PA082 : prog A101/7).

RADIO 4 (VHF)
23.30 Social work, community work and society : Introduction to the Course (DE206 : prog 1).
23.50 The Early Roman Empire and the rise of Christianity : Power and persuasion : The Augustan Revolution (A291 : prog 1).

RADIO 3 (VHF)
Alternative broadcasts for North Scottish and mid Welsh transmitters
24.00* The pre-school child : You Tell Us (P912 : prog 4).
00.20* Consumer decisions : Consumer groups (P931 : prog 4).
00.40* Economics and education policy : Economics and Policy Making (ED322 : prog 1).

Tuesday February 19

BBC 1
6.40 Understanding space and time : "Mr Galileo Was Correct" (S354 : prog 1).
7.05 Structure, bonding and the periodic law : Spectroscopic Methods of Structure Determination (S25[illegible] : prog 1).
7.30 Science foundation course : Motion—Newton's Laws (S101 : prog 3).

BBC 2
6.40* Man's religious quest : Pilgrimage (AD208 : prog 7).
7.05 The handicapped person in the community : Am I Being Unrealistic? (P251 : prog 1).
7.30* An introduction to calculus : The Binomial Theorem (MS283 : prog 2).
16.00* Introduction to pure Mathematics : Ideas of Space (M203 : prog 1).
17.15* Computing and computers : Projects Mean People (PM951 : prog 1).

RADIO 3 (VHF)
6.00 Education and the urban environment : Growing up in Tower Hamlets (E361 : prog 1).
6.20* Technology foundation course : Using Drawings, Models and Broadcasts (T101 : prog 2).
6.40 Reading development : Sounds and Letters (PE231 : prog 1).
19.00* Personality and learning : Teachers' Ideas About Personality and Learning (E201 : prog 1).
10.40* Integration and normed spaces : Completeness (M351 : prog 1).

RADIO 4 (VHF)
23.30 Renaissance and reformation : The Age of Discovery (A201 : prog 2).
23.50 The Enlightenment : Fielding and Patronage (A204 : prog 2).

RADIO 3 (VHF)
Alternative broadcasts for North Scottish and mid Welsh transmitters
24.00* Instrumentation : The Moving Coil Meter and the Pneumatic Transducer (T291 : prog 1).
00.20* Use of Libraries—2.
00.40* Great Britain 1750-1950 : sources and historiography : The Process of Research : An 18th Century Example (A401 : prog 2).

Wednesday February 20

BBC 1
6.40* Curriculum design and development : The Mackenzie File (E203 : prog 1).
7.05 The development of instruments and their music : The Baroque Organ (A304 : prog 1).
7.30 Arts foundation course (A101) : Doing History (PA082) : Writing History (Prog A101/3).

BBC 2
6.40 Personality and learning : Helping Jenny (E201 : prog 1).
7.05 Ecology : Introduction to Ecosystems (S323 : prog 1).
7.30* Comparative physiology : Introduction : The Animal Kingdom (S322 : prog 1).
15.50 Genetics : Past, Present and Future (S299 : prog 1).
17.15 The nature of chemistry : Stereochemistry : Things in Three Dimensions (S304 : prog 3).

RADIO 3 (VHF)
6.00 Political economy and taxation : The Threat of Leviathan (D323 : prog 1).
6.20* History of architecture and design 1890-1939 : The Mansions of Decorative Art in the 1890's (A305 : prog 2).
6.40 Music Fill.
18.20 The Enlightenment : Fielding and Patronage (A204 : prog 2).
18.40* Making sense of society : What is Crime? (D101 : prog 2).

RADIO 4 (VHF)
23.30 Technology for teachers : Pencils of the Project Method (PET271 : prog 1).
23.50* Use of Libraries—1.

RADIO 3 (VHF)
Alternative broadcasts for north Scottish and mid Welsh transmitters
24.00* Problems of philosophy : Body and Mind : A Dialogue from Malebranche (A303 : prog 1).
00.20* Greece 478-336 BC : Greek Colonization (A292 : prog 1).
00.40* Analysis : Some Examples on Inequalities (M231 : prog 1).

Thursday February 21

BBC 1
6.40* Personality and learning : Helping Jenny (E201 : prog 1).
7.05 The Enlightenment : Fielding and Patronage (A204 : prog 1).
7.30* Making sense of society : Crime (D101 : prog 2).
6.40 Introduction to pure mathematics : Ideas of Space (M203 : prog 2).
7.05 Industrial relations : The Main Parties (IR[illegible] : prog 3).
7.30* Oceanography : Going to Sea (S334 : prog 1).

BBC 2
15.50* Elements of music : Score Reading (A241 : prog 1).
17.15* Policies, people and administration : An MP's Surgery (D336 : prog 1).

RADIO 3 (VHF)
6.00* Patterns of inequality : What is inequality? (D302 : prog 1).
6.20 The rise of modernism in music 1890-1930 : Nineteenth Century Currents (A308 : prog 1).
18.30* The first years of life : As Soon as it is Born (P911 : prog 4).
18.45* Computing and computers : Introducing the Course (PM951 : prog 1).

RADIO 4 (VHF)
23.30* Social psychology : Researching Psychosexual Identity (D305 : prog 1).
23.50* Instrumentation : The Moving Coil Meter and the Pneumatic Transducer (T291 : prog 1).

RADIO 3 (VHF)
Alternative broadcasts for north Scottish and mid Welsh transmitters
24.00* Decision making in Britain : What Kind of society do we want? (D203 : prog 1).
00.20* Biochemistry and molecular biology : Biochemists and Biochemistry (S322 : prog 1).
00.40* Geology : Looking at Rocks (prog 1).

Friday February 22

BBC 1
6.40 Systems performance : human factors and systems failures : Search and Rescue (TD342 : prog 1).
7.05* Control of technology : Time, Money and Technology (T361 : prog 1).
7.20* The nature of chemistry : Stereochemistry : Things in Three Dimensions (S304 : prog 3).

BBC 2
6.40 Modern art from 1848 to the present : styles and social implications : Art and Film (A351 : prog 1).
7.05 Geology : Earth Materials (prog 1).
7.30* Materials processing : Brick by Brick (T352 : prog 1).
15.50* Images and information : Your Own Optics Laboratory (ST291 : prog 1).
17.15* The Earth's physical resources : Resources and Reserves : Some Basic Concepts (S266 : prog 1).

RADIO 3 (VHF)
6.00 Genetics : Past and Present (S299 : prog 1).
6.20* Biochemistry and molecular biology : Biochemists and Biochemistry (S322 : prog 1).
6.40* Analysis : Some Examples on Inequalities (M231 : prog 1).
18.20* Fundamentals of human geography : Dartmoor : Recreation and Farming (D204 : prog 1).
18.40 Music Fill.

RADIO 3 (VHF)
Alternative broadcasts for North Scottish and mid Welsh transmitters
24.00* Social psychology : Researching Psychosexual Identity (D305 : prog 1).
00.20* Management in education : Three Levels of Management (E321 : prog 1).
00.40* The development of instruments and their music : An Introduction to the Course (A304 : prog 1).

* repeated programme

COURSES

Classified Advertisements Index

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THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

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For information and conditions of service write to (Quoting Department): THE REGISTRAR, THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY, P.O. BOX 793, LAE, PAPUA NEW GUINEA before 15 March, 1980.

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

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MATHESON LIBRARY

SALARY: K19,830 per annum

Initial contract period, three years. Other benefits include a gratuity equal to 24%. Appointment, repatriation and leave fares (staff member and family); settling-in and out allowance; six weeks paid leave per year; education fares and assistance towards school fees; free housing. Salary continuations and medical benefit schemes available.

For information and conditions of service write to (Quoting Department): THE REGISTRAR, THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY, P.O. BOX 793, LAE, PAPUA NEW GUINEA before 15 March 1980.

UNIVERSITY OF OXFORD IN ASSOCIATION WITH MAGDALEN COLLEGE

UNIVERSITY LECTURER in Chemical Pathology

The University proposes to appoint a lecturer in the Sir William Dunn School of Pathology, to take up post on 1 October 1980 or as soon as possible thereafter. The lecturer will work in association with the incoming E. P. Abraham Professor of Chemical Pathology, Dr G. G. Brownlee, who takes up post on the same date. The successful candidate will have a strong research interest in molecular and cellular biology.

Salary according to age on the scale £5,052 to £11,171 (interim scale effective from 1 April 1980). The post may be held in association with a fellowship at Magdalen College.

Further enquiries concerning the lecturership and the fellowship should be addressed to Professor H. Harris, F.R.S., Sir William Dunn School of Pathology, South Parks Road, Oxford, from whom further particulars may be obtained and to whom applications (eight copies; one in the case of overseas candidates), together with the names of three referees, should be sent by 31 March, 1980.

UNIVERSITY OF CAMBRIDGE

Assistant Director Development Studies

Applications are invited for a University office of Assistant Director of Development Studies. The successful candidate will participate in the teaching of economics in the Cambridge courses in Development Studies with particular reference to planning and project appraisal. Working experience in developing countries is required and preference may be given to a candidate with experience in agricultural project planning. The appointment will be for two years, but one year appointments, possibly on secondment from universities or relevant research institutions overseas, would be considered.

Salary will be in the range £7,073-£11,171.

Applications with details of publications, experience, and the names of two referees should be sent to the Secretary, Overseas Studies Committee, 28 Selwyn Gardens, Cambridge CB3 9DB, by 31 March, 1980, from whom further particulars can be obtained.

BATH

THE UNIVERSITY

Applications are invited for the post of

ASSISTANT BURSAR

who will have amongst other duties particular responsibility for Security arrangements in the University. The post becomes available from 1st August 1980.

Salary in the range £7,050-£9,801.

Further particulars obtainable from the Personnel Officer, University of Bath, Bath, BA2 7AY.

Closing date for applications 10th March 1980. Ref: 80/27.

UNIVERSITY OF MELBOURNE

RESEARCH FELLOW GR.1/GR.2 in the SCHOOL OF PHYSICS

Applications are invited for the position of Post-Doctoral Research Fellow in the Experimental Nuclear Structure Physics Group. Current nuclear research activities are principally focused on determinations of static and dynamic electromagnetic moments, lifetimes, and other parameters and systematics of short-lived excited states. Emphasis is on utilization of heavy-ion-induced multiple Coulomb excitation (HI, xn), and light-ion transfer reactions using a variety of in-beam spectroscopic techniques and methods. Major facilities used include a 14 UD Pelletron tandem accelerator at the Australian National University and a 5U Pelletron single-ended accelerator at Melbourne University. Excellent ancillary equipment, facilities, on- and off-time computers. Enquiries may be directed to Professor H. H. Bolotin of the School of Physics.

Salary within the ranges Research Fellow Grade 1 $A14,673 to $16,809; Research Fellow Grade 2 $A17,024 to $22,364 p.a.

The appointment provides for travel allowances and is for a period of up to three years in the first instance and is available immediately.

Further information, including details of application procedure and conditions of appointment, is available from the Staff Officer. Applications referring to position number 600 320 should be addressed to the Staff Officer and close on 1 April 1980.

ALL APPLICATIONS FOR APPOINTMENTS should be addressed to the Staff Officer, University of Melbourne, Parkville 3052, Australia.

CARDIFF

UNIVERSITY COLLEGE

DEPARTMENT OF PLANT SCIENCE

Applications are invited for a TEMPORARY LECTURESHIP in PLANT BIOCHEMISTRY, tenable for a fixed period of 1 year from 1st September, 1980. Preference will be given to persons with experience in either nucleic acid metabolism or metabolic regulation.

The appointment will be made within the first four points of the salary scale: £5,032 p.a. to £6,062 p.a. Duties to commence 1st September, 1980.

Applications (2 copies), together with the names and addresses of two referees, should be forwarded to the Vice-Principal (Administration) and Registrar, University College, PO Box 78, Cardiff CF1 1XL, from whom further particulars are available. Closing date 14th March, 1980. Ref. 1977.

ESSEX

THE UNIVERSITY

LECTURESHIPS IN LAW

Applications are invited for three Lectureships in the newly established School of Law tenable from October 1, 1980. Salary Scale £5,032 to £10,484 per annum.

Applications (nine copies), including a curriculum vitae and the names and addresses of three referees, should reach the Registrar (AO, 90/THES), University of Essex, Wivenhoe Park, Colchester CO4 3SQ, from whom further particulars may be obtained, by February 29, 1980.

UNIVERSITY COLLEGE DUBLIN

DEPARTMENT OF ENGLISH (2 POSTS)

APPOINTMENTS IN OLD AND MIDDLE ENGLISH

Applications are invited for two appointments in Old and Middle English. One appointment will be full-time, the other will be a temporary one year appointment. For the full-time appointment candidates should have a special interest in Language and Stylistics. For the temporary appointment candidates should have a special interest in Medieval English Prose and Rhetoric. The full-time appointment will be made at the level of either Assistant Lecturer or College Lecturer. The temporary appointment will be made at the level of Assistant Lecturer.

The current salary scales are:

Assistant Lecturer: £4,958-£8,089.

College Lecturer (under review): £7,777-£10,037.

Entry point on the relevant scale will be in accordance with qualifications and experience. There is a non-contributory pension scheme.

Prior to application, further information (including application procedure) should be obtained from the Secretary and Bursar, University College, Belfield, Dublin 4. Telephone enquiries: 693244, ext. 431.

The latest date for receipt of completed applications is THURSDAY, 20th MARCH, 1980.

BATH

THE UNIVERSITY

SCHOOL OF MATERIALS SCIENCE

POLYMER ENGINEERING RESEARCH

This new investigation into the fracture of g.r.p. offers experience in:

Commissioning a purpose-built servo-hydraulic test rig.

Developing software for high-speed data acquisition.

Using electron optical and acoustic emission techniques.

It will provide a challenge for an engineer, materials scientist, metallurgist or physicist who is either post doctoral or has relevant industrial experience.

The work is directed by Mr. M. G. Phillips, funded by the Polymer Engineering Directorate of S.R.C. for a period of three years.

Commencing salary up to £5,725 per annum.

Application forms from the Personnel Officer, University of Bath, Bath BA2 7AY, quoting reference number 80/30. Closing date will be March 3rd, 1980.

COLAISTE NA H OLLSCOILE CORCAIGH

UNIVERSITY COLLEGE CORK

PROFESSOR OF MUSIC

Applications are invited for the above post.

Salary range (under review) is: £11,361 to £13,370 p.a.

Application forms and further details of the post may be obtained from the undersigned.

Latest date for receipt of applications is Friday, March 7, 1980.

FELLOWSHIPS IN ORGANISATIONAL BEHAVIOUR AND BUSINESS POLICY

Applications are invited for Fellowships in Organisational Behaviour and Business Policy. Candidates should be experienced in teaching, and working with, senior management, be able to teach Oxford University undergraduate and postgraduate students and be committed to advanced study and research. Business experience would be an advantage.

Salary plus USS will be based on the Centre's Scale.

For further details please write quoting ref: TH to: The Director, Oxford Centre for Management Studies, Kennington, Oxford OX1 5NY.

Closing date for applications 20th February, 1980.

BELFAST

THE QUEEN'S UNIVERSITY

LECTURESHIP IN OVERSEAS HISTORY

EXPANSION OF EUROPE

A lectureship in the Department of Modern History is available from 1st October, 1980, or such other date as may be arranged. The lecturer will teach the history of colonial expansion and decolonisation in the nineteenth and twentieth centuries. Initial placing, which will depend on age, experience and qualifications, will be made at one of the first three points on the scale for lecturers £5,032, £5,391, £5,727, rising to £10,484 with contributory pension rights under the FSSU/USS. The appointment will be subject to a period of probation of up to three years.

Further particulars are available from the Personnel Officer, The Queen's University of Belfast, Belfast BT7 1NN, Northern Ireland. Closing date: 19th March, 1980 (please quote Ref. 80/THES).

EDINBURGH

THE UNIVERSITY

DEPARTMENT OF SOCIOLOGY

TWO TEMPORARY LECTURESHIPS 1980-81

Professor Tom Burns will be on leave from teaching in 1980-81 on a S.S.R.C. personal research grant. It is intended to replace him with two temporary lecturers, each to be appointed within the salary range £5,032 to £6,309 per annum, and to hold the post for the year commencing 1st October, 1980.

Applications for these posts, including a curriculum vitae and names of three referees, should be lodged by 10th March with the Secretary to the University of Edinburgh, Old College, South Bridge, Edinburgh, EH8 9YL, from whom a statement of the particulars of appointment can be obtained. Please quote reference 1003.

HONG KONG

THE UNIVERSITY

LECTURESHIP/ASSISTANT LECTURESHIP IN CIVIL ENGINEERING

Applications are invited for a post of Lecturer/Assistant Lecturer expected to be established in the Department of Civil Engineering from 1 September, 1980.

Applicants should have honours degree and preferably higher degrees in Civil Engineering, with teaching or research experience in civil engineering management or building construction, and should preferably be members of the Institution of Civil Engineers or hold other appropriate professional qualifications.

Annual salaries (superannuable) are: — Lecturer HK$67,920 by $4,560 to $77,040 bar $81,600 by $4,800 to $115,020; Assistant Lecturer HK$49,500 by $4,620 to $63,360 (£1 equals HK$10.70 approximately). Starting salary will depend on qualifications and experience.

At current rates, salaries tax will not exceed 15 per cent of gross income. Housing at a rental of 7½ per cent of salary, education allowance, leave and medical benefits are provided.

Further particulars and application forms may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Recruitment Section, Secretary's Office, University of Hong Kong, Hong Kong.

The closing date for applications is April 18, 1980.

GLASGOW

THE UNIVERSITY

LECTURER IN AERONAUTICAL ENGINEERING

Applications are invited for the above post in the Department of Aeronautics and Fluid Mechanics, tenable from October 1, 1980.

The successful applicant will be expected to teach and undertake research in the general field of aerodynamics. Ongoing research within the department includes applied fluid dynamics and airframe aerodynamics of both aerospace and industrial nature. Applicants should hold a higher degree in a relevant subject or, alternatively, a bachelor's degree with appropriate experience.

Salary will be within the range £5,032 to £7,410 of the Lecturers' Scale £5,032 to £10,484, under review, with placement according to age, qualifications and experience.

Further particulars may be obtained from the Secretary of the University Court (Room 1B), University of Glasgow, Glasgow, G12 8QQ, with whom applications (8 copies), giving the names and addresses of three referees, should be lodged on or before March 31, 1980.

In reply please quote Ref. No. [illegible]

KEELE

THE UNIVERSITY

LECTURER IN DEPARTMENT OF SOCIAL POLICY AND SOCIAL WORK

Applications invited for post of Lecturer in Social Policy to assist in development of new principal subject as part of dual honours undergraduate course.

Applicants with interests in areas of social policy other than the personal social services preferred.

Initial salary £5,032-£5,727 per annum in Lecturers scale (full scale to £10,484) with membership of Universities Superannuation Scheme.

Application forms and further particulars from the Registrar, The University, Keele, Staffs, ST5 5BG, to whom completed forms should be returned by 29th February, 1980.

LONDON

THE UNIVERSITY

SCHOOL EXAMINATIONS DEPARTMENT

ART SUBJECT OFFICER

The School Examinations Department, which conducts the G.C.E. examination for the University of London at centres in the U.K. and overseas, has a vacancy for a Subject Officer in Art and Design and Technology.

The person appointed will be responsible for overseeing the process of examining in Art, Design and Technology, History of Art, Graphical Communication and Technical Drawing as well as the administration and development of syllabuses in these subjects. A graduate qualification in Art or a specialised qualification in the technical subjects is essential and previous administrative experience in the field of examination and/or teaching is desirable.

The initial salary, according to age, qualifications and experience, will be in the range £4,165 to £8,873 per annum plus £740 London Allowance with the possibility for a suitable applicant to move to the range £7,910 to £9,891 per annum plus £740 London Allowance. Six weeks' holiday plus public holidays plus privilege days.

Further particulars and application forms are available from Miss J. Slater, Assistant Personnel Officer, School Examinations Department, 66/72 Gower Street, London WC1E 6EE. Telephone 01-636 8000, ext. 80. Completed application forms should be returned no later than March 7, 1980.

LONDON

THE UNIVERSITY

GOLDSMITHS' COLLEGE

LECTURESHIP IN MATHEMATICS

Applications are invited for the post of Lecturer in Mathematics to undertake teaching at undergraduate level. A higher Degree and published work is essential, preferably in Applied or Applicable Mathematics. Required for 1st September 1980, or as soon as possible thereafter.

Salary on scale £5,116 by 12 increments to £8,247 per annum inclusive of London Allowance and supplement. (Under review.)

Write for further particulars to the Personnel Officer, University of London, Goldsmiths' College, New Cross, London SE14 6NW, to whom applications should be submitted by 14th March 1980.

Universities continued

HULL
THE UNIVERSITY
DEPARTMENT OF ECONOMICS AND ECONOMETRICS
LECTURESHIP

Applications are invited for a lectureship in the Department of Economics and Econometrics from October 1, 1980.

Applicants may have interests in any field of economics but those with research and teaching interests in industrial or business economics may be given preference.

Salary scale: £5,642 to £11,481 per annum (from April 1, 1980 plus USS benefits.

Applications (six copies), giving details of any qualifications and references, together with the names of three persons from whom references can be sought, should be sent by March 31, 1980, to the Registrar, The University of Hull, Hull HU6 7RX, from whom further particulars may be obtained. Please quote ref. F.2.

OXFORD
KEBLE COLLEGE
SENIOR SCHOLARSHIPS

The college is offering three Senior Scholarships, open to women and men, tenable from October 1, 1980 for up to three years. Two of the Scholarships are open, one carrying a preference for those undertaking Pure Mathematics at Oxford, and one is confined to Current members of the College. In awarding one of the Open Scholarships, preference will be given to those not graduating until the summer of 1980. Members of other Oxford colleges are not eligible. The maximum value of the scholarship will be £400 a year with limited dining rights at High Table. A Senior may be required to do a limited amount of paid teaching for the college.

Further particulars and application forms may be obtained from the Secretary to the Tutor for Undergrads, to whom application should be made before March 14.

LONDON
QUEEN MARY COLLEGE
THE UNIVERSITY
HALLS MANAGER

Applications are invited for this post at the College Halls of Residence in South Woodford.

The Manager will be responsible to the College Secretary for all the general administration of the Halls which accommodate 100 students, but may own one conference guests.

Whilst some secretarial assistance will be provided, ability to exercise financial control and supervise staff essential.

Salary on scale £[illegible] April 1, £[illegible] per annum, plus £740 London Allowance and residence.

Further details available from the Secretary (THES), Queen Mary College, Mile End Road, London E1 4NS, to whom applications should be sent not later than March 4.

LONDON
THE UNIVERSITY
DEPARTMENT OF ECONOMIC HISTORY

The Senate invite applications for the post of

STAFF TUTOR IN MUSIC

who will work in the Tutorial Classes Department of the University, with academic responsibility for the music education essential.

Salary on the scale £4,755 - £9,501 (under review) per annum, plus £740 London Allowance.

Further application forms from the Personnel Officer, Senate House, Malet Street, London WC1E 7HU, to be submitted by February 29, 1980.

LONDON
UNIVERSITY COLLEGE

The University College Council invites tenders in connection with the proposed re-roofing of the Wilkins Building, Gower Street, London WC1, to be completed by October 1, 1980.

Applicants should have a special interest in aspects of Victorian Art or Architecture in London, c.1800-c.1850.

The Lecturer will be a member of the Department of History of Art, with responsibilities for teaching undergraduates, postgraduates and participating in the life of the department.

Applications by the March 1 closing date, with the names of three referees, should be addressed to the Registrar, University College London, Gower Street, London WC1E 6BT, from whom further particulars may be obtained.

MANCHESTER
THE UNIVERSITY
TEMPORARY LECTURER IN EDUCATION (E.M.L.)

Applications are invited for this post at the College Halls of Residence in South Wood[illegible]

The Manager will be responsible to the College Secretary for all the general administration of the Halls which accommodate 100 students, but may own one conference guests.

Whilst some secretarial assistance will be provided, ability to exercise financial control and supervise staff essential.

Salary on scale £[illegible] April 1, £[illegible] per annum, plus £740 London Allowance and residence.

Further details available from the Secretary (THES), Queen Mary College, Mile End Road, London E1 4NS, to whom applications should be sent not later than March 4.

MANCHESTER
THE UNIVERSITY
ASSISTANT STUDENT ADMINISTRATOR (E.L.)

Applications are invited for this post tenable from May 1, 1980 from graduates or persons holding appropriate professional qualifications.

Candidates should preferably not be over 30 years of age.

The appointee will assist in limiting difficulties occasioned for students, particularly in respect of financial accommodation based by the University.

Initial salary within range £[illegible] - £[illegible] p.a.

Particulars and application forms (returnable by February 15th) from the Registrar, The University, Manchester M13 9PL. Quote ref. E/80/21/S.

SHUTTAMPTON
THE UNIVERSITY
FACULTY OF MEDICINE
SOUTHAMPTON PSYCHIATRIC CASE REGISTER

Applications are invited for the post of RESEARCH DIRECTOR from honours graduates with research experience in a field related to psychiatry. The Director, who will have overall responsibility for data collection and for the general administration of the register, will be expected to ensure that the research potential of the register is realised as fully as possible.

The post, which is funded by the MRC, is for five years in the first instance. The Director will be employed as a Senior Research Fellow by the University and will be a member of the University Department of Psychiatry (Head: Professor J. L. Gibbons).

The post is superannuable on USS terms. Starting salary will be at an appropriate point in the Senior Research Fellow Lecturer scale, £7,268 to £11,101 (under review).

Applications (six copies) with the names of three referees, should be sent by 14th March, 1980, to Professor J. L. Gibbons, Department of Psychiatry, Royal Hollis Hospital, Hollis Road, Shutt[illegible] 9PH, tel. 34094, ext. 2434, from whom further particulars can be obtained. Please quote reference: THES.

STRATHCLYDE
THE UNIVERSITY

Applications are invited for a post of ADMINISTRATIVE ASSISTANT on the staff of the Registrar. Previous experience of administrative work preferably in higher education and possession of a degree, preferably an honours degree or the holder of equivalent responsibility will be an advantage.

Appointment on Grade 1A of the national salary structure for administrative staff. Salary scale from April 1980, £2,402 to £5,769 per annum with placing according to qualifications and experience.

Superannuation benefit.

Application forms and further particulars (quoting G/381) and enclosing a self-addressed envelope 19in by 4in), may be obtained from the Academic Appointments Officer, University of Strathclyde, Level Collège Building, 204 George Street, Glasgow G1 1XW, to whom applications should be lodged by 29 February 1980.

BIRMINGHAM
THE UNIVERSITY
FACULTY OF LAW
BARBER INSTITUTE OF JURISPRUDENCE

Applications are invited for the Barber Chair of Jurisprudence vacant on the death of Professor S. Brodsky.

Salary is the professorial range plus superannuation.

Further particulars available from the Registrar, University of Birmingham, PO Box 363, Birmingham B15 2TT to whom twelve copies of application (and from overseas candidates) should be sent by March 24.

Fellowships and Studentships

OXFORD
WORCESTER COLLEGE

Worcester College invites applications from men and women for a

CARISTRIAN JUNIOR RESEARCH FELLOWSHIP IN FINE ART

with a preference for fine or applied art of the period of the Renaissance, which interests.

The closing date for applications is March 31, 1980, and further particulars may be obtained from the college secretary.

SHEFFIELD
THE UNIVERSITY
A SENIOR TEMPORARY RESEARCH FELLOWSHIP

in the Department of Pharmacology, Pharmacy and Medicinal Chemistry

This work will be computer assisted drug design research funded by national/international agencies for research activities aim at interdisciplinary research.

Ph.D. or similar research qualifications and at least two years of post-doctoral experience in a related field are essential. Ability to work in a team and to supervise research students is essential.

Salary on scale £[illegible] - £[illegible] per annum, plus £740 London Allowance and residence.

Further details and application forms from the Personnel Officer, Sheffield S1 3JD, quoting reference 1/1/1/1, and Secretary, The University, Sheffield S10 2TN, to whom applications should be sent by March 14, 1980.

BIRMINGHAM
THE UNIVERSITY
FACULTY OF LAW
BARBER INSTITUTE OF JURISPRUDENCE

Applications are invited for the Barber Chair of Jurisprudence vacant on the death of Professor S. Brodsky.

Salary is the professorial range plus superannuation.

Further particulars available from the Registrar, University of Birmingham, PO Box 363, Birmingham B15 2TT to whom twelve copies of application (and from overseas candidates) should be sent by March 24.

OXFORD
THE UNIVERSITY
ST HUGH'S COLLEGE
BARBARA SHUCKBURGH JUNIOR ROMAN ARCHAEOLOGY

The College invites applications for a Fellowship, available from 1st October, 1980, tenable for two years, and open to men and women who have completed their first degree in Classics or Ancient History.

Further details and application forms from the Secretary to the Governing Body, St Hugh's College, Oxford OX2 6LE, to whom applications should be sent by 14th March.

OXFORD
ST HUGH'S COLLEGE
CHRISTINE DUNCAN OFFICIAL FELLOWSHIP AND MEDICAL LECTURESHIP

The college invites to elect, with effect from 1st October, 1980, an Official Fellow in Medical History or History of Medicine, who will be expected to teach undergraduates in Medical History, to develop research in medical interests of the College, to take part in the life of the College, and to undertake such other duties as may be assigned by the Governing Body.

The Fellowship may be held in the early medical Lectureship (C.U.F.) or Senior Lectureship (C.U.F.) or Senior Lectureship (C.U.F.) or Senior Lecturer (C.U.F.) or Reader (C.U.F.) or Professor (C.U.F.) in the University of Oxford.

Research students for higher degree in the fields of information and theory of medicine, medical ethics, medical history are also required.

Applications (many copies) and nominations are invited. Research Studentships will be awarded to suitably qualified graduates in astrophysics, applied mathematics. All are available for 3 years.

Further details and application forms from the Admin. Department of Mathematics, The University, Sheffield S3 7RH. Applications should be sent to the University Registrar and Secretary, The University, Sheffield S10 2TN, to whom applications should be lodged by 29 February 1980.

Polytechnics

TEESSIDE POLYTECHNIC
Department of Electrical Instrumentation & Control Engineering
Re-Advertisement
LECTURER II/
SENIOR LECTURER
Electronic Engineering

To join the Electronics and Computer Technology Group, which is primarily responsible for the BSc (Hons) in Computer Technology. The Group is also heavily engaged in teaching electronics on the other courses in the Department. A good Honours degree, including a substantial amount of Electronic Engineering is essential. Industrial experience is highly desirable.

Salary scale: £4,470-£8,597 (efficiency bar)—£7,791 (work bar)—£8,263.

An appointment will be made within the salary range £4,470-£9,927.

Further particulars and application forms, which are returnable within 14 days of the appearance of this advertisement, are obtainable from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA.

Teesside Polytechnic
Department of Electrical Instrumentation & Control Engineering
Re-Advertisement
READER
Computer Engineering

A new post has been created to lead the Department's development and research in digital computing.

The successful applicant will also engage in some teaching on the degree courses operating in the Department.

A good Honours degree, and a higher degree relating to research involving a significant amount of digital computing are required. The applicant should also have several years of experience in a closely related field in digital computing.

Salary scale: £7,600-£9,939.

Further particulars and application forms, which are returnable within 14 days of the appearance of this advertisement, are obtainable from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA.

LONDON
MIDDLESEX POLYTECHNIC
LECTURER IN EUROPEAN INDUSTRIAL ADMINISTRATION

(Ref. 1/2/1/1)

Applications are invited for a lectureship to teach on the Polytechnic's BA (Hons) in European Business Administration. Applicants should have an active interest in the European Community and experience of European business and business administration and management.

Full-time Associate Lecturers (C.U.F.) in Accountancy and Finance to teach on evening courses with the development of a new undergraduate and part-time degree courses, and business administration and management.

Full-time Associate Lecturers (C.U.F.) in Quantitative Methods to teach on evening courses with the development of a new part-time degree course.

Applicants may be appointed to any of these posts at the Middlesex College, Hendon, Mansfield Road, London NW4 4BT.

Salary scale: £4,470-£8,597 (efficiency bar)—£7,791 (work bar) with effect from 1st September, 1980.

Further details and application forms (quoting ref. 1/2/1/1) from the Personnel Officer, Middlesex Polytechnic, Hendon, Mansfield Road, London NW4 4BT (01-202-4271, Ext. 217).

Closing date: 15th March, 1980.

CITY OF BIRMINGHAM
THE POLYTECHNIC
COMPUTER CENTRE
LECTURER II/SENIOR LECTURER IN COMPUTER SCIENCE

Applications are invited for two additional temporary posts within the Academic Division of the Computer Centre.

Applicants should be graduates and should possess sound knowledge of computer science and several years practical experience in computer applications.

Salary scale: Lecturer II: £[illegible] - £7,791 (bar) Senior Lecturer: £[illegible] - £8,263.

Further details and application forms (quoting ref. 1/2/1/1) from the Personnel Officer, Middlesex Polytechnic, Hendon, Mansfield Road, London NW4 4BT (01-202-4271, Ext. 217).

Closing date: 15th March, 1980.

UNIVERSITY OF LANCASTER
Department of Educational Research
POSTGRADUATE RESEARCH DEGREES

Applications are invited from honours graduates in education, Psychology, sociology or other social sciences (including B.Ed.) who wish to undertake research in education leading to the degrees of M.Sc., M.Litt., or Ph.D. Supervision is available in numerous areas including teacher classroom skills, curricula and examinations; higher and adult education; teaching and organisation in primary schools, economics of education and educational planning; various aspects of social and cognitive development in childhood and adolescence. Applications will be particularly welcomed from those wishing to work in the following two areas, the effects of failing school tests; and education for adults.

The Department receives a number of S.S.R.C. studentships for allocation to either recent graduates or final-year undergraduates to enable them to pursue their research interests. Further details are available from the Graduate Studies Tutor (Research), Department of Educational Research, Cartmel College, University of Lancaster, Lancaster LA1 4YL, telephone 0524 65201, extensions 4494 or 4497. Please quote ref. T8 on correspondence.

KEBLE COLLEGE, OXFORD
SENIOR SCHOLARSHIPS 1980
Further Particulars

The College is offering three Senior Scholarships open to men or women tenable from 1 October, 1980 for up to three years. Election, in the first instance, is for one year; but the Scholarship is renewable for a further two years. Two of the Scholarships are open to all except members of other Oxford Colleges; the third is confined to current members of this College. In awarding one of the Open Scholarships, preference will be given to those not graduating until the summer of 1980. One of the Open Scholarships also carries a preference for students graduating elsewhere than Oxford. All candidates must intend to read for a higher degree or diploma of the University of Oxford.

The maximum value of a Scholarship will be £150 a year. Senior Scholars are also permitted two free dinners a week on High Table during Full Term with the right to introduce one guest per week (for whom charge would be made). If they are unmarried, they will be guaranteed a room in College in their first year; thereafter balloting on equal terms with other graduates. The College has some accommodation for married graduates. Scholars may be required to undertake some limited teaching for the College, for which payment would be made.

Applications should be returned to the Secretary of the Tutor for Graduates by Friday, 14th March. Interviews will be held on Wednesday, 23rd April, and it is hoped that elections will be made within the following fortnight.

Applicants are particularly asked to notice that their referees should ask their referees to write to the Tutor for Graduates; no request for references will be sent by the College. References should be sent as early as possible, and at latest by Thursday, 20th March.

TRENT POLYTECHNIC NOTTINGHAM
LECTURER GRADE II/SENIOR LECTURERS

£4,542-£7,773 (Bar)-£8,325
required in the following areas:—
EDUCATIONAL PSYCHOLOGY (2 posts)

Good Honours graduates required from April or September to teach on undergraduate Social Studies, Humanities and Teacher Education programmes. One post will have special reference to the training of teachers for work with Mentally Handicapped pupils, especially E.S.N. (s). The other post will be of wider application but special interests are sought in child development, deviance and delinquency, or the psychology of sport participation and performance

FASHION DESIGN

Suitably qualified designer with some experience in knitwear.

THREE DIMENSIONAL DESIGN

Applicants should have a design background with suitable practical experience to be able to be responsible for the oversight and management of a department common workshop.

Further details and form of application from The Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU. Closing date: 29 February 1980

BRIGHTON POLYTECHNIC
Faculty of Natural and Life Sciences
Principal Lecturer
In Charge of Chiropody
£7,680-£9,639

The School of Chiropody is to be established jointly by the House Authority and Brighton Polytechnic, and will be located at Eastbourne. The appointment will date from 1st September 1980, and the school will open in September 1981.

For further details and application form: please contact the Personnel Officer, Brighton Polytechnic, Moulsecoomb, Brighton BN2 4AT. Tel.: Brighton 693655, ext. 219. Closing date 8th March, 1980.

The Polytechnic of North London
Department of Environmental Design
The Self-Help Housing Resource Library
CO-ORDINATOR

The resources library, founded by external agencies required a part-time Co-ordinator for its work with operative housing groups. The appointment, graded as a temporary part-time research assistantship, is for a period of twelve months in the first instance, with a possibility of extension depending upon the availability of additional funding.

Salary: £1,800 p.a. for 18 hours per week. Flexible working hours by arrangement.

Application form and further details obtainable from Mrs. C. Cox, Department of Environmental Design, Polytechnic of North London, Holloway Road, N7 8DB. (01-607 2789, Ext. 2199.).

Closing date for applications Monday, February 25th, 1980.

THE POLYTECHNIC
APPLICATIONS ARE INVITED FOR THE FOLLOWING SUBSTANTIVE LECTURESHIP:
CHEMISTRY
DESIGN
MATHEMATICS
FASHION
AND
SENIOR LECTURER IN PHYSICAL EDUCATION
Salary Scale: Lecturer II: £4,470 - £7,791 (Bar) Senior Lecturer: £7,680 - £8,263
Further details and application forms (quoting ref. 1/2/1/1) from the Personnel Officer, Middlesex Polytechnic, Hendon, Mansfield Road, London NW4 4BT (01-202-4271, Ext. 217).
Closing date: 15th March, 1980.

PRESTON
THE POLYTECHNIC
Applications are invited for the following substantive LECTURESHIP:
CHEMISTRY
DESIGN
ECONOMICS
MATHEMATICS
PHYSICS
PSYCHOLOGY
SOCIOLOGY
FASHION
AND
SENIOR LECTURER IN PHYSICAL EDUCATION
Salary Scale: Lecturer II: £4,470 - £7,791 (Bar) Senior Lecturer: £7,680 - £8,263
Further details and application forms (quoting ref. 1/2/1/1) from the Personnel Officer, Middlesex Polytechnic, Hendon, Mansfield Road, London NW4 4BT (01-202-4271, Ext. 217).
Closing date: 15th March, 1980.

Polytechnics continued

The Polytechnic of North London
HEAD OF DEPARTMENT (Grade V)
Department of History Philosophy and Contemporary European Studies

To have responsibility in conjunction with senior staff for the academic operation and development of the Department. The person appointed will be expected to take a major role in the proposed evening-only degree courses. Applicants must have substantial academic qualifications and research experience, preferably in History, and have been involved in course development and administration at a senior level.

Salary Scale: £10,128-£11,253 plus £500 London Allowance.

Further information and application forms may be obtained from the Secretary & Clerk to the Court of Governors, Polytechnic of North London, Holloway Road, N7 8DB. Tel. No. 01-607 2789, ext. 2011.

The closing date for applications will be 11th March 1980.

PROFESSOR AND HEAD OF DEPARTMENT LEGAL STUDIES

Applicants should have high academic qualifications and experience of academic administration at senior level. A record of successful research and professional practice in law are also desirable. Above all, the Head should be able to provide academic leadership to a vigorous well-qualified staff.

Salary: Head of Department Grade VI (£10,850-£12,075, but under review).

The person appointed will also be considered for a Professorship.

Further information and form of application from The Assistant Director (Administration), Trent Polytechnic, Burton Street, Nottingham NG1 4BU, to whom applications should be returned as soon as possible.

TRENT POLYTECHNIC NOTTINGHAM

OXFORD
THE POLYTECHNIC
FACULTY OF EDUCATIONAL STUDIES
HEAD OF DEPARTMENT OF EDUCATION

Salary Grade VI, £10,850 to £12,075 (under review)

Applications are invited for the post of Head of the Department of Education in the Faculty of Educational Studies. The Department is responsible for initial training in the O.C.D. courses and teaches as far as for B.A. and B.Ed. degrees. Applicants should have proven academic ability, with qualifications at least to M.A. standard.

Applications, including curriculum vitae should be sent by 21 March 1980 to the Director, Oxford Polytechnic, Headington, Oxford OX3 0BP, from whom further particulars and application forms may be obtained.

PRINCIPAL LECTURER IN THE DEPARTMENT OF EDUCATIONAL DEVELOPMENT

Salary £8,856 to £9,186 (Bar) to £10,254 (under review)

To lead the Educational Media Unit.

Applications, including a curriculum vitae and the names of three referees, should be sent by 21 March 1980, to the Head of the Department of Educational Development, Cromwell Park, Chipping Norton, Oxfordshire, Telephone: Chipping Norton 2191, from whom further particulars and application forms may be obtained.

Colleges and Institutes of Higher Education

ROEHAMPTON INSTITUTE OF HIGHER EDUCATION
A federation of Digby Stuart, Froebel, Southlands and Whitelands College.

The Roehampton Institute of Higher Education is a federation of four Colleges, Digby Stuart, Froebel, Southlands and Whitelands, located within two miles of each other in South-West London. All teaching staff are appointed to the Roehampton Institute and each is assigned to one of the constituent Colleges, though the courses and teaching are intercollegiate. The Roehampton Institute offers courses leading, at present, to internal BA, BH and BSc degrees of the University of London which may be awarded at classified honours level, and BEd (Ord) and BEd (Hons) degrees. All degree courses offered by the Roehampton Institute are in combined studies based on a unit system, so that each student follows courses in two subject areas.

The Institute now seeks to make the following senior appointments with effect from 1 September 1980:—

HEAD OF EDUCATION DEPARTMENT
Digby Stuart College
Full particulars available on request (see below) but it is important that applicants should understand that Digby Stuart is a Roman Catholic College
Salary: Burnham HoD Grade V (£10,128-£11,253) plus London Allowance £609.

HEAD OF EDUCATION DEPARTMENT
Froebel Institute College
Full particulars available on request (see below).
Salary: Burnham HoD Grade V (£10,128-£11,253) plus London Allowance £609.

HEAD OF DEPARTMENT
Home Economics
Applicants should be able to demonstrate a wide range of experience in Home Economics in its broadest context and should have a higher degree with research experience in one or more of the following fields of study:—
Food Sciences
Textiles
Sociology of the Family
Consumer Services
The Department offers degrees of Home Economics in combined studies and Home Economics as a specialism in teacher education. An ability to develop links with Industry, Commerce and the Social and Health Services would be particularly desirable.
Salary: Burnham HoD Grade V (£10,128-£11,253) plus London Allowance £609.

CO-ORDINATOR FOR EDUCATIONAL TECHNOLOGY
This is a new post with two areas of responsibility:—
(a) to co-ordinate the teaching of, and to initiate developments in, Educational Technology in its broadest context including curriculum development, course design, and staff development.
(b) to supervise technical services for Resources in Learning.
Salary: Burnham HoD Grade IV (£9,303-£10,431) or Grade V (£10,128-£11,253) plus London Allowance £609.

CO-ORDINATOR FOR IN-SERVICE
This is a new post with responsibility for initiation, development and co-ordination of the in-Service activities of the Institute, primarily in teacher education but also in other areas.
Salary: Burnham HoD Grade IV (£9,303-£10,431) or Grade V (£10,128-£11,253) plus London Allowance £609).

For further particulars and application forms please write (stating CLEARLY the post for which application is made) to:—
R. A. Fenwick, Assistant Secretary, Roehampton Institute of Higher Education, Richardson Building, Digby Stuart College, Roehampton Lane, London SW15 5PH.
CLOSING DATE for receipt of applications: Tuesday, 11 March, 1980. (Interviews for short-listed candidates will be held between Tuesday, 29 March, and Tuesday, 1 April, 1980, inclusive.)

WEST GLAMORGAN County Council
West Glamorgan Institute of Higher Education

Application forms and further details of these posts are obtainable from the Principal, West Glamorgan Institute of Higher Education, Townhill Road, Townhill, Swansea. The closing date for the receipt of completed applications is FRIDAY, 29th FEBRUARY, 1980.

HEAD OF LIBRARY AND LEARNING RESOURCES (PRINCIPAL LECTURER GRADE)

Required as soon as possible, the post entails responsibility for all the Institute's book and non-book learning resources. Applicants should be graduates with a library qualification and experience of non-book learning resources. Conditions of Service will be those of the National Joint Council.
(Ref: HE/L/1/THES) Salary Scale: £6,246-£9,162 (bar) p.a.

SENIOR LECTURER IN ENGLISH

Responsibilities will include a major role in the B.A. (Combined Studies) and Dip. H.E. courses and applicants should have initial and higher degrees in English and interests in the relationship between literature and society, particularly in Nineteenth and Twentieth centuries, literature and multi-disciplinary studies. Recent teaching experience in a secondary school would be an advantage. To commence in September.
(Ref: HE 4/2/12/79/THES) Salary Scale: £7,092-(bar)-£8,871 p.a.

John Beale
Director of Education

EDGE HILL COLLEGE OF HIGHER EDUCATION
St Helens Road, Ormskirk, Lancashire
An Associate College of the University of Lancaster
Department of Environmental Studies
TEMPORARY LECTURER II IN AFRO-ASIAN STUDIES

Applications are invited for the above post tenable from 1st September, 1980 until 31st August 1981. The successful candidate will be required to teach courses mainly in Afro-Asian Studies leading to B.A. Honours and Ordinary degrees. The College is seeking to appoint a graduate with a library qualification and experience of non-book learning resources. Conditions of Service will be those of the National Joint Council.
(Ref: HE/L/1/THES) Salary Scale: £6,246-£9,162 (bar) p.a.

John Beale
Director of Education

SOUTH GLAMORGAN COUNTY COUNCIL
SOUTH GLAMORGAN INSTITUTE OF HIGHER EDUCATION (CARDIFF)
FACULTY OF EDUCATION
PHYSICAL EDUCATION DEPARTMENT

Applications are invited from suitably qualified persons for the following full-time appointment tenable from 1st September, 1980:—
LECTURER, GRADE II: PHYSICAL EDUCATION

Applicants should preferably be graduates with appropriate specialist physical education qualifications. The possession of a higher degree will be a distinct advantage.
The successful applicant will be required to include in the B.A. (Hons.) Human Movement Studies Degree Course and will need to possess qualifications and experience in at least two of the following areas of study:—
Sports Psychology; Bio-mechanics; Philosophy of Human Movement; Aesthetics; Measurement and Evaluation of Human Performance; and Sociology of Sport, Leisure and Recreation.
Also, specialisation, at a very high level of performance, will be required in two or more of the practical fields; dance, gymnastics (trampolining and olympic gymnastics), swimming and water-based activities, games and outdoor pursuits (orienteering).
Salary Scale: Lecturer Grade II—£4,470-£7,149 per annum £9 per month comparability supplement.

Application forms and further particulars may be obtained from the Personnel Officer, South Glamorgan Institute of Higher Education, Dynevor, Cardiff, CF2 4XO, and should be returned within 14 days of the date of the advertisement.

RICHMOND COLLEGE
The American International College of London

Chairman, Division of Business Administration and Economics

Richmond College is a rapidly developing liberal arts college with an international student population of about 500. A dynamic and experienced chairman is needed to manage the B.A. degree programme in Business Administration and Economics. The largest major in the College. The successful applicant should have academic administrative experience and at least an M.B.A. although a doctoral degree is preferred.

Starting date: September 1, 1980.
Salary negotiable depending upon experience and qualifications. Liberal fringe benefits. Letters of application and resumes, including at least two referees, should be submitted to: Robert Kuehn, Academic Dean, Richmond College, Queens Road, Richmond, Surrey TW10 6JP.
The closing date for applications is April 1, 1980.

ST. MARY'S COLLEGE, FENHAM
Newcastle upon Tyne NE4 8YH
(In association with Newcastle Polytechnic)
Required for September, 1980
LECTURER II/SL RESPONSIBLE FOR MODERN LANGUAGES

to teach French and German in the Postgraduate Certificate of Education and to make a contribution to modern language teaching (French/German/Italian) in the International Baccalaureate Course.

For further details and application form (to be returned by Friday, February 29th) please write to the Principal's Secretary (0632-743920).

RICHMOND COLLEGE
The American International College of London

Chairman, Division of Business Administration and Economics

Richmond College is a rapidly developing liberal arts college with an international student population of about 500. A dynamic and experienced chairman is needed to manage the B.A. degree programme in Business Administration and Economics. The largest major in the College. The successful applicant should have academic administrative experience and at least an M.B.A. although a doctoral degree is preferred.

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Salary negotiable depending upon experience and qualifications. Liberal fringe benefits. Letters of application and resumes, including at least two referees, should be submitted to: Robert Kuehn, Academic Dean, Richmond College, Queens Road, Richmond, Surrey TW10 6JP.
The closing date for applications is April 1, 1980.

SOUTHAMPTON
LA SAINTE UNION COLLEGE OF HIGHER EDUCATION
Roehampton Lane, Southampton
Required for September:
LECTURER II in ENGLISH (two posts) with responsibility for the Academic Studies programme of the English Department.
LECTURER II in HISTORY (temporary for 2½ years) to teach the Modern Studies course, the History course in B.Ed. Programme, and in B.A. Programme.
LECTURER II in THEOLOGY specialist in New Testament to teach for B.Ed. and B.Th. courses.
Further details and application forms from the Principal's Secretary, La Sainte Union College of Higher Education, 286 Hill Avenue, Southampton SO2 1RA. Closing date for applications 29th February, 1980.

Holidays and Accommodation

SUNKHOUSE, SNOWDONIA
Ideal base for instructional, Transport, Groups, Weekends, Walks, Climbing, Mountaineering. Tel. (0654) 710464.

Administration

HM Inspectors of Schools

HIGHER AND FURTHER EDUCATION

Applications are invited from men and women, preferably aged between 35 and 45, for appointment as HM Inspectors to work mainly in the field of higher and further education, excluding universities. All HMIs undertake general duties as well as specialist work. Candidates should therefore have an interest in higher and further education generally and not only in the specialist areas listed below:

APPLIED PHYSICS

Applicants must have substantial experience in the teaching of physics/applied physics to degree level in the maintained or university sector, together with responsibilities in the field of course development. Industrial and/or research experience highly desirable.

BUSINESS STUDIES (SECRETARIAL)

Applicants must be well qualified in secretarial skills and have had substantial teaching experience, preferably including the management of a secretarial section or department. Business experience at a supervisory level highly desirable.

CONSTRUCTION EDUCATION

Applicants must have a degree or equivalent professional qualification in one or more of the following disciplines: architecture, planning, surveying; appropriate teaching and professional/industrial experience is essential. This post will also involve all aspects of Construction Education at craft, technician and professional levels.

ENGINEERING EDUCATION

Applicants must have appropriate degree and professional qualifications in mechanical engineering, production engineering or aeronautical engineering. They should hold or recently have held a senior teaching post in further or higher education. Relevant industrial experience essential.

HOME ECONOMICS

In addition to appropriate academic qualifications in home economics, applicants must have related teaching experience in further or higher education. Relevant experience in industry or commerce and a general interest in food education courses advantageous.

NAUTICAL STUDIES

Applicants must have appropriate academic/professional qualifications and experience in nautical education and industry. Additional qualifications in, or experience of one or more of the following advantageous: fisheries education, astronomy, meteorology, nautical education in schools and non-vocational education.

SOCIAL SCIENCES (FE)

Applicants must have appropriate teaching experience in further or higher education and a degree in Sociology, Social Administration or a related subject. A qualification and/or experience in social work advantageous.

STARTING SALARY within the range £10,350-£16,000 (higher in London). Higher posts are normally filled by promotion.

Application forms (to be returned by 14 March) and further information may be obtained from Miss B. C. Taylor, Department of Education and Science, Room 10/2, Elizabeth House, 39 York Road, London SE1 7PH. Telephone: 01-928 9222, extension 2237 or 2488. Please quote 1/80 E.

DEPARTMENT OF EDUCATION AND SCIENCE

PROGRAM ADMINISTRATOR

East-West Center

The East-West Center is a national educational institution founded by the U.S. Congress in 1960 to promote better relations and understanding among nations in Asia, the Pacific and the U.S. through cooperative programs of study, research, and training. These programs focus on crucial problems of mutual consequences from which poor relations and misunderstanding among nations stem. All Center programs are multinational and multidisciplinary. Staff, visiting scholars and senior professionals, and graduate degree students form teams which work on these problems.

Applications and nominations are being accepted for a limited term position of Program Administrator for the Pacific Islands Development Program—a special project, placed for administrative purposes in the Office of Student Affairs and Open Grants. Initial appointment is three years with possible two year extension.

Under the general direction of the President and in cooperation with the Institute Director and the Dean of Student Affairs and Open Grants, the Program Administrator will determine the general scope of the Program based on the needs defined by participants in the Pacific Islands Conference to be held in March 1980 involving Pacific leaders and specialists. He or she will have full responsibility for the Program and its staff, will formulate broad program objectives and provide leadership in planning operational goals and objectives; evaluate accomplishments against the project objectives as the basis for continuous revision and improvement of project plans and operations; will provide intellectual, academic, and administrative leadership in execution of projects; will consult with Center institutes in the development and implementation of joint/Program cooperative projects; will have major responsibility for fund-raising for the Program; will develop an annual budget and expenditure plan for the Program, and authorize expenditures; will establish and maintain professional support activities including a resource materials collection; and will act as a liaison with the Dean of Student Affairs and Open Grants in relation to matters of mutual concern, especially administrative matters. In addition, Directors and its participating institutions, organizations, and governments and leaders. Pacific literal countries, international organizations, and the international community on matters relating to the Pacific and/or Pacific Islands.

Required Qualifications: Ph.D. or equivalent in a relevant behavioural or social science (e.g. ecology [Pacific], economics, anthropology or public administration). Demonstrated ability to work effectively with and have a high degree of credibility with Pacific Island leaders represented by at least 9 years experience with Pacific Island governments or regional organizations in the Pacific. (b) educational or research program administration and development. Proven ability as an effective administrator: to communicate effectively both orally and in writing research and educational programs. Demonstrated ability to perform individual research and to organize programs. Demonstrated ability to work cooperatively with institutions and individuals of different cultures and countries. Knowledge of Government and administrative procedures and structures in island countries/territories. Knowledge and familiarity with formulation of grant and contract proposals.

Preferred Qualifications: Knowledge of at least one Pacific language. Experience at the governmental or regional level, rather than single country experience.

Starting Salary: $34,715.00 per year plus post-of-living allowance of 212.5 per cent (subject to change).

Submit resume with cover letter which includes title of position sought, a narrative description detailing relevance of your qualifications and background to the responsibilities of this position, must be postmarked by April 4, 1980. Send to: Rebecca Lambeck Personnel Office, Dept. HES, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96848.

An Equal Opportunity Employer M/F

Kingston Polytechnic

EXAMINATIONS OFFICER

A senior administrative assistant required to manage a section responsible for implementing all aspects of examinations, central organization and procedures, for student records, the admission of overseas students, short courses and the DES statistical returns.

Interesting and varied work involving close liaison with academic and administrative staff throughout the Polytechnic. Administrative experience in an educational establishment and a degree would be useful.

AP4/5 £4,594-£6,197 inclusive.

Details and application forms (to be returned by 20th February) from Assistant Registrar (Personnel), Kingston Polytechnic, Penrhyn Road, Kingston upon Thames, KT1 2EE.

Colleges of Further Education

LONDON

THE COLLEGE OF LAW

LECTURESHIP IN LAW

Applications are invited from suitably qualified persons for a post at the above College.

The salary will be within the scale £5,004 to £11,040 p.a. (which includes a London allowance of £750) with the exact entry point dependent on the qualifications and experience. Normal annual increments are payable.

Apply with full personal, professional and academic details and the names of two referees to the Director, The College of Law, 29-31 Cursitor Street, London EC4A 1HX, from whom further particulars may be obtained.

SURREY

COUNTY COUNCIL

EPSOM SCHOOL OF ART AND DESIGN, SURREY INSTITUTE OF ART AND DESIGN

Applications from suitably qualified persons for the post of Principal Lecturer (Painting and Drawing) are invited for the Epsom School of Art and Design, Surrey Institute of Art and Design, Dorset Road, Epsom, Surrey.

The successful candidate will be responsible for the development of painting and drawing, and will be expected to teach in the School's Foundation Course and to contribute to the development of the School's Fine Art Degree course.

Salary: £6,594-£7,197 per annum.

Further particulars and application forms may be obtained from the Administrative Assistant (Establishment), Epsom School of Art and Design, Surrey Institute of Art and Design, Dorset Road, Epsom, Surrey KT18 7UP, quoting reference PL/80/1, to whom completed forms should be returned within two weeks of the appearance of this advertisement.

All advertisements are subject to the conditions of acceptance of Times Newspapers Ltd., copies of which are available on request.

The Polytechnic of North London

ASSISTANT DIRECTOR

Applications are invited for appointment as an Assistant Director who will be the fifth member of the Polytechnic's Directorate Management Group. This vacancy results from the appointment of Dr. D. MacDowall as Director of the Polytechnic.

The person appointed will initially take a special role in academic development, student recruitment, the Polytechnic's validation and monitoring of courses, and the development of links with industry, commerce and the professions.

Salary: £15,195 plus £800 London Allowance per annum. Particulars are obtainable from the undersigned to whom applications should be returned not later than 11 March, 1980.

P. Knight, Secretary & Clerk to the Court of Governors, The Polytechnic of North London, Holloway Road, London N7 8DB.

Personal

IMMEDIATE ADVANCES

£100 to £20,000.

No security needed

REGIONAL TRUST LTD.

8 Clifford Street, New Bond Street, London, W.1.

Phone 01-734 0865/01-734 0914

GRADUATE ENGINEER

required by small dynamic electrical contractor in South Buckinghamshire. Ideal for ambitious person. Please ring Hedley Wills, Write Box 0047 TES.

Awards

THE BRITISH ACADEMY

RESEARCH AWARDS 1980

1 Small Grants Research Fund in the Humanities

Applications are invited for grants to support research in the humanities. Applicants should be serving members of the staff of universities or other institutions of higher education in the United Kingdom.

2 British Academy Research Grants

Applications are invited for grants to support research in the humanities and, to a lesser degree and by invitation, in the social sciences.

Applications to the above should be submitted by individual scholars for their private research, at a postdoctoral level, on the prescribed form, by the end of February and April, 1980.

3 'Thank-Offering to Britain' European Research Fellowships

The Academy offers post-doctoral Fellowships for up to three years for specific programmes of investigation on a topic of an economic, industrial, social political, literary or historical character relating to the British Isles. Preference will be given to projects in the modern period. Applications should be submitted by 31 March, 1980.

Further particulars of all Academy awards are obtainable from the Secretary, The British Academy, Burlington House, Piccadilly, London W1V 0NS (tel.: 01-734 0184).

Colleges and Institutes of Technology

RGIT

ROBERT GORDON'S INSTITUTE OF TECHNOLOGY, ABERDEEN

GRAY'S SCHOOL OF ART

LECTURER

in Jewellery/Metalwork.

Practising Jeweller/Metalworker with professional and/or teaching experience, to teach senior students of jewellery and General Course students.

Salary scale in range £4,422-£8,391 per annum (under review).

Assistance with removal expenses.

Details from the Secretary, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen, AB9 1FR. (0224-574511.)

DUNDEE COLLEGE OF TECHNOLOGY

Department of Electrical & Electronic Engineering

SENIOR LECTURESHIP (A) IN DIGITAL SYSTEMS

Applicants should possess a good honours degree in Electrical and/or Electronic Engineering and preferably higher degree, together with appropriate industrial and/or research experience in digital systems and/or computers. The person appointed will be expected to teach at honours degree level and to lead a research group.

Salary (currently under review): £7,500-£8,673 (bar) £9,855, with initial placing dependent upon approved previous experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms may be obtained from the Administrative Assistant (Establishment), Dundee College of Technology, Bell Street, Dundee, DD1 1HG, to whom applications should be lodged by 3 March 1980.

General Vacancies continued

NEWBATTLE ABBEY COLLEGE

STAFF TUTOR

Applications are invited for appointment as Staff Tutor at Newbattle Abbey College, a residential adult college offering a two-year Diploma course and other courses in Liberal Studies. The successful applicant will be primarily responsible for the sessional course in Sociology, and should also be prepared to contribute to the teaching of other Diploma subjects in the area of Politics.

Salary, according to qualifications and experience, on the scale £4,422-£7,812 (under review). The appointment will take effect from the 1st September, 1980, or as soon as possible thereafter.

Further particulars and application forms may be obtained from The Secretary to the Governors, Newbattle Abbey College, Dalkeith, Midlothian, EH22 3LL, to whom applications should be returned by 20th February, 1980.

General Vacancies

Third World Teacher Training

Retiring soon? Career teacher? Teacher trainer? Voluntary Service Overseas needs resourceful, experienced teachers, for teacher training posts from September 1980.

Primary

Kiribati (Gilbert Islands): 5 posts for primary or middle-school-trained male teachers to upgrade English language teaching in primary schools.

Other posts for maths, science and English specialists in Tanzania, Papua New Guinea and Nigeria.

Secondary

Maths/science teacher trainers for Ghana, Sri Lanka and St Kitts, and modern language specialists to train teachers of English in Thailand.

Terms of service: local salary, but we provide fares, accommodation and NI/Superannuation contributions during the two-year posting.

For details of those and other Third World teaching opportunities tick the relevant box and send this advertisement to us:

Education Room E13
Voluntary Service Overseas
9 Belgrave Square, London SW1X 8PW

Voluntary Service Overseas

I am interested in Primary teacher training ☐
Secondary teacher training ☐ Other teaching posts ☐

Name .....

Address .....

.....

My qualifications are .....

Research Assistants

Applications are invited from graduates or post graduates with appropriate qualifications, for one or more posts of Research Assistant to work on a business history covering the first twenty-five years of nationalised railways in Britain. The author will be Dr. T. R. Gourvish.

The appointment will be initially for a two-year period, tenable from 1st April 1980, or as soon as possible thereafter. Salary will be at an appropriate point on the Research Council Scales. The Research Assistant/s appointed will be based in London W2.

Please apply, in the first instance, with a curriculum vitae and the names of two academic referees, to:-

Dr. T.R. Gourvish,
School of Social Studies,
University of East Anglia,
Norwich. NR4 7TJ.

To be received no later than 8th March, 1980.

LEICESTER

THE UNIVERSITY

DEPARTMENT OF CHEMISTRY

RESEARCH ASSOCIATE

Applications are invited for a Research Associate to work with Professor M.J.H. Russell on projects concerned with f.e.r. studies of electron capture by metallic products, for two years. Salary on scale £4,766 to £8,173.

Please contact Professor M. J. H. Russell, Department of Chemistry, University of Leicester, Leicester LE1 7RH, as soon as possible.

MANCHESTER

THE UNIVERSITY

"RESEARCH ASSISTANT" IN THE DEPARTMENT OF CONSERVATIVE DENTISTRY

Applications invited from graduates in Chemistry, preferably with post-doctoral experience in trace-element analysis, or similarly qualified persons, to assist with research projects within the department.

Initial salary range £4,406 to £6,903 p.a. Superannuation.

Application forms returnable by February 22nd from the Registrar, The University, Manchester M13 9PL. Quote ref. 28/80/128.

Overseas

Applications are invited for the four posts of:

Head of the School of Education

Professor of Education

Senior Lecturer in Education

Senior Lecturer in Mathematics Education

at the University of Bophuthatswana in Mmabatho near Mafeking — a new, non-racial, innovative institution in one of the most interesting and challenging parts of the African educational scene.

This is a unique opportunity to contribute to the planning and development of a School of Education which is due to accept its first students in April 1980.

The School of Education will comprise four clusters of subjects: Language Education, Social Education, Science and Mathematics Education, and, finally, Professional Studies in Education.

The Professor of Education will be the leader of this last-named cluster, whose initial staff will comprise at least six people.

For the professorship and the senior lectureship (Education) we would be particularly interested in candidates with special interests in the social and philosophical foundations of education, but applicants from any field of education are encouraged to apply. An orientation to innovation and to interdisciplinary teamwork is essential.

The senior lecturer (Mathematics Education) will function as a team member in the cluster of Science and Mathematics Education (Biology, Physics, Chemistry, and Maths).

Salaries

Head of School and Professor: R16 000 — R18 000 p.a.
Senior Lecturer: R11 400 — R16 000 p.a.

Applications

For further information, please contact Miss Jenny Lloyd, Chester House, 278 High Holborn, London WC1 V7HE. Telephone 01 4056684.

Or address your application with full details of qualifications and experience to: The Rector, University of Bophuthatswana, Private Bag X2046, Mmabatho, 8601, Bophuthatswana, Southern Africa.

Closing date for applications: 14 March 1980.

University of Bophuthatswana

UNIVERSITY OF BIELEFELD

The Faculty of Linguistics and Literary Studies invites applications from scholars with the Habilitation or equivalent qualifications, and who have published and taught in the field of English Linguistics, for the vacant chair (Stelle eines Professors [C4]) of

ENGLISH LINGUISTICS (Anglistik/Linguistik)

Applicants are expected to have worked with recent developments in linguistic theory and to have experience in empirical language description. In accordance with the general policy of the Faculty, an interest in problems on the borders of linguistics and literary studies would be desirable. Applicants are also expected to have an interest in problems of general methodology and to be willing to participate in interdisciplinary cooperation and in experimental curricular reforms.

Letters of application, accompanied by the usual personal documentation, should be sent to the:

Dekanat der Fakultät für Linguistik und Literaturwissenschaft der Universität Bielefeld
Universitätsstr. 1
Postfach 8640
4800 Bielefeld 1
Federal Republic of Germany.

Announcements

SOCIAL SCIENCE RESEARCH COUNCIL

CHILDREN IN CARE RESEARCH PROGRAMME

The report of an SSRC Exploratory Panel on research on Children in Care is now available. In it the Panel identifies four major areas where it wishes to encourage research:

- the effects of social and economic trends on care practices and policies;
- the decision-making processes involved in the care system;
- The evaluation of alternative forms of care;
- The perceptions of care by children and others involved in their care.

A detailed research programme is now being drawn up. Those interested in pursuing research falling within the Panel's priority areas are invited to write with outline proposals to: The Children in Care Research Development Officer, Mr. F. Loughran, Department of Social Administration, 8 Priory Road, Bristol BS8 1TF.

Outline proposals should be sent before 31 March, 1980. Copies of the report "Children in Need of Care" are available from Mr. Loughran at the above address or from: SSRC, Information Division, 1 Temple Avenue, London EC4Y 0BD.

Research Posts

LONDON BUSINESS SCHOOL

CENTRE FOR ECONOMIC FORECASTING

Following the appointment of Professor Terry Burns as Chief Economic Adviser to HM Treasury we are seeking an economist to join our group working on macro-economic forecasting, research and policy analysis. Applicants should have experience in forecasting, model-building or applied econometrics.

The appointment will be as senior research fellow (salary from 1st April on the scale £8,823 to £11,226); or senior research officer (salary from 1st April on the scale £5,753 to £9,510). It is possible that there may be more than one vacancy. Those who are interested or who seek further information are invited to write to:—

ALAN BUDD

LONDON BUSINESS SCHOOL

SUSSEX PLACE, REGENT'S PARK, LONDON NW1

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COLLEGE OF ARTS AND TECHNOLOGY

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Part-time LECTURERS are required for THREE-DIMENSIONAL DESIGN, FASHION ILLUSTRATION.

Both appointments are for 1½ days a week.

Further details and application forms (four stamps) of Dr. Bennett, Wellington Road, Taunton, Somerset TA1 5AX.

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Universities continued

NEW ZEALAND

MASSEY UNIVERSITY

Palmerston North, New Zealand

LECTURESHIP IN ZOOLOGY

Applications are invited for the tenured position of Lecturer in Zoology in the Department at Massey and Zoology. The major zoological interests of the Department are in the ecology and behaviour of non-marine animals.

The successful applicant will be expected to contribute to the teaching programme, to develop a postgraduate research programme, to carry out research in animal behaviour, and will therefore have a higher degree in zoology with emphasis on quantitative aspects of animal behaviour.

Salary at the Lecturer's scale NZ$13,725 to $16,861.

Further details of this position and of the University, together with the annual emoluments of appointment may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or the Registrar of the University.

Applications close by 28 March, 1980.

Librarians

SUSSEX

THE UNIVERSITY

UNIVERSITY LIBRARIAN

Applications are invited for the post of University Librarian, which falls vacant upon Mr. J. B. Lewis's appointment as Director General Bibliographic Services, British Library. The salary will be in Grade IV for senior library staff and has been fixed at £13,824 per annum.

Further particulars are available from the Registrar and Secretary, Recruitment Office, Sussex House, Falmer, Brighton BN1 9RH, to whom applications by 21st March, 1980, should be addressed.

Librarians continued

Colleges and Institutes of Technology continued

Union view

Time to say 'enough is enough'

It is right and proper that bodies funded from public money should have accountability for that money to the community as a whole. It is also right and proper that the community should have a continuing interest and the right to express views about the nature of public bodies which they are funding and which serve them.

We, in the universities, recognize this and are willing at all times to enter into debate about the nature of the education we are providing, the kind of institution we are, and are prepared to justify to the hilt the public money that is spent in providing the university system for the United Kingdom.

However, sometimes we should say "enough is enough" and the "endless continuing debates, series of investigations, surveys and reports defeat the purpose for which they occur.

It does seem that over the past few years we have had such a surfeit of debates on the universities and specific aspects of university work that we are being hindered in what we are trying to achieve.

The pamphlets have poured out in their hundreds and the books published in their dozens, committees have sat endlessly and we are bound to ask at this stage what have they all achieved?

For example, there have been a large number of reports dealing with specific aspects of university work and university education and research. Off-hand one can think of the Swann Report No 1 on engineers and scientists; the Swann Report No 2 on veterinary science and veterinary education; the James Report on teacher training; the Rothschild Report on university research; the Ormerod Report on law; the Finniston Report, etc; Select committees and sub-committees have investigated, questioned and cross-examined; the Murray Report on the University of London; the Flowers Report about to be issued—not to mention the "great debate" initiated by James Callaghan—and the two reports on the universities in the 1960s, and the list can go on endlessly.

Nobody minds very much that these activities take place and perhaps out of this welter might emerge points that can be taken up and implemented. The difficulty is that the mere existence of an investigation, whether it be by a select committee or a committee of inquiry or a Royal commission hinders and delays any form of definitive action.

In the last couple of years if anyone tried to raise the position of professional engineers they were told to await the Finniston Report. If you raised university finance you were told to await the Report of the Public Accounts Committee who were dealing with that particular problem.

It has been the whole history of the universities over the past 10 years to have been studded, with examples of a lack of real effective consultation on the grounds that some review of another is taking place.

AUT

This is why unions get into a complete state of frustration in trying to achieve anything, whether it be for the direct good of its own members or for the universities as a whole (aims which are often synonymous).

Yet while we will be inhibited, restricted and put off and told to wait, governments find no such inhibitions when they wish to take decisive action. When the system of cash limits was introduced into the university system and automatic supplementation for salary increases was ended, there was no consultation; no waiting for some body to report on the desirability or otherwise of the action. The word was issued from Whitehall and that was the end of the matter!

Good intentions are often expressed but are never fulfilled in reality.

Enquiries are set up by the Government not to take expert advice and allow different interested groupings in having their say—they are set up primarily as a means of delaying decisions. However, if a Report is issued to the Government's liking it will, within twenty-four hours, have its recommendations accepted. This happened with the Prices and Incomes board report Number 98 which dealt a shattering blow to university pay and conditions.

When the Government is way of a recommendation it will say that before it makes up its mind it will have to have further consultation with the parties, thereby killing the recommendations they do not like in a process of attrition by lengthy discussions and the seeking of further factual information and by using all the other devices by which delay can occur. These have been revealed very tellingly in the Crossman and Barbara Castle diaries.

At the same time, let AUT put forward proposals that give even the tiniest hint of bending some establishment protocol, and one finds that it is difficult to obtain real consultation and if concentrated pressure is exerted on an issue, another committee is set up to consider "all aspects of the problem".

Neither are the universities short of advice. People educated in one particular discipline will use the experience of that discipline or use their own general experience of that discipline or use their own general experience to traverse the whole of the university scene to see what is wrong and what can be put right. At the same time another individual with a different discipline background is going through exactly the same process and contradictory recommendations and views thus emerge.

We in AUT, who have the responsibility for the well-being of our members and of the universities, are forced into the position of keeping an eye on all these exercises in case something should be used by the Government as an excuse to do something unpalatable. Or we are obliged to reply to what are no more than ineffectual criticisms lest it be thought that we are unable to reveal the truth behind these criticisms.

That is why "enough is enough" and we hope that the Government and Parliament will set an example by giving us a period of calm instead of rattling forth a series of inquiries and investigations that take us all precisely nowhere.

Laurie Sapper

The author is general secretary of the Association of University Teachers.

Science in America

The journey into space will go on

Clive Cookson

Many Americans believe that national aeronautics and space administration has lacked a real central purpose since it triumphantly deposited Neil Armstrong and his colleagues on the surface of the moon in July, 1969. Nevertheless, the momentum of the 1960s carried NASA successfully through the 1970s with more lunar landings at the beginning of the decade followed by a spectacular series of unmanned planetary missions.

The most exciting feed of all came in 1976 when the two Viking landers touched down on the rocky martian desert and started sending back breathtaking colour pictures as well as digging up samples.

Almost as astonishing was the tour of Jupiter and its moons made by Voyager 2 last summer (particularly the photograph of a volcano erupting, which was used on the cover of three national monthly magazines in January, 1980—that is a long history).

First such three-way clash in publishing.

Voyagers 1 and 2, which were launched back in 1977, are due to fly past Saturn in November, 1980, and August, 1981, respectively and, on past performance, should give a good show. But they will wrap up NASA's planetary extravaganza for at least five years.

The next scheduled planetary mission is Galileo, which is due to blast off towards Jupiter in 1984. Two years later the spacecraft will reach the giant red planet and send a probe down into its atmosphere.

In fact, Galileo is the only planetary venture currently under development by NASA. The agency has finally lost its momentum.

American space buffs often blame the uninspired bureaucrats at NASA for their lack of vision and poor management, and the criticism is valid. But (as if often pointed out) the men who run NASA and the programmes they can persuade the President and Congress to fund are only a reflection of the declining interest in space exploration on the part of politicians and public.

Despite the lack of popular enthusiasm, NASA would almost certainly have been allowed to proceed with one or two more planetary missions

The shuttle—officially known as the Space Transportation System (STS)—is currently nearly three years behind schedule and its costs have run billions of dollars ahead of early estimates. As might be expected, the delay is due to a combination of bad luck and bad management.

The most serious technical problems, which still have not been solved, involve heat-shielding tiles that do not stick properly to the shuttle's fuselage, and engines that do not fire reliably. They have been exacerbated by NASA's short-sighted penny-pinching policy of cutting the testing of the system's components to a bare minimum.

The latest official prediction from NASA administrator Robert Frosch is that the first space shuttle will be launched at the end of this year, objective observers believe spring or summer 1981 is more likely.

Sooner or later, though, the Space Transportation System will be fully operational, with at least four separate shuttles carrying all sorts of satellites into orbit round the earth. On average each shuttle should make a trip into space and back once a fortnight.

Many of the payloads will be military communications and spy satellites (pressure from the Pentagon has ensured that the administration and Congress will continue to back-roll the shuttle through its problems). Others will be commercial communications satellites, weather satellites, earth resources satellites, and so on. And a few will be dedicated to pure science.

The first big shuttle-based scientific project will be the $500m space telescope due to go up in 1983. This 10-ton observatory should enable astronomers to see up to 10 times further into space than the biggest land-based instruments, which have to operate beneath the obscuring veil of the earth's atmosphere.

Development of a gamma ray observatory, to be launched in 1985, will start next year if Congress approves.

Nor must we forget the two spacelabs, general purpose manned laboratories being developed by the European Space Agency (including Britain).

So significant scientific advances will be made in space during the 1980s, though they are unlikely to match the spectacular strides taken during the 1960s and 1970s. Will the pace pick up again in the 1990s? Will NASA then be preparing manned expeditions to the planets and building permanent manned space stations?

Philip Handler, president of the National Academy of Sciences, agrees that if NASA muddles along year by year without any long-term goals the losses to science will be substantial". But at present only a small minority in Congress is in the mood to challenge President Carter's consistent refusal to draw up a new American space policy.

Don's diary

Monday

Looking out of my bedroom window, the slate tiles on the rows of terraced houses gleam greyly in their wetness at a threatening sky. Waterproof trousers will not be necessary for my 10-minute cycle ride to the university research annexe. It is only drizzling. A good start to the week.

Monday is the busiest day. It is the day I like to make up all my buffers and ring solutions afresh before I start experiments. My current series of experiments is time-consuming, as usual. My test-tubes cannot be left alone for long and I am at their back and call. Sometimes rewarding, more often depressing, I have to plan my life around them.

I get going that bit later, yet still hope to make the lunch-time seminar. I never know whether I shall make it or not, nor whether I shall be able to stay till the end. Not until the last minute.

Today I do not make it and I am annoyed. This week's perk has gone by the board. I am consoled by the report that it was not a good time.

But in the meantime I have gone up one point in the popularity scale. I have been available to turn off a centrifuge for a colleague. Favours and congratulations are highly esteemed.

All afternoon I keep a close eye on my incubations. I add things to my test-tubes, move them from the warm incubator to the cold-room and back again. All at appointed times—to the minute. I give them slow spins in chilled centrifuges or run them at high speed in vaccumed centrifuges. I try not to imagine them spinning round at 65,000 rpm. It is too disorientating and spoils my concentration.

Tuesday

From my bedroom window I see those slate tiles staunchly resisting the deluge of hailstones and driving rain. Mournfully, I don my cycle clips and waterproofs.

The print-out brings good news. Progress has been made. Whistling good-naturedly, I struggle with the tissue-culture technicians about my cell requirements for the immediate future.

Enough time in the afternoon to get to the library ten-minutes' walk away. It is hard to keep up with the literature, but important. I return to take off an incubation, and to keep an appointment with my professor. Biochemists and medically orientated professors do not always see eye to eye about the way forward but can be an invaluable mix. He is pleased now with the work, which we both always worry about.

Wednesday

The slate tiles are invisible. Ever respectful of freezing fog I give my bike a rest and cautiously make my way to the canteen in fur-coat and nonslip shoes.

An old friend calls in at lunch-time to look round. As we eat our sandwiches in the tea-room, she remarks that I can't like my work, much as I seem to be changing jobs just about every year.

I say that I enjoy research to the point of addiction and explain o her growing horror and disbelief that cancer research is a precarious career, and you're lucky to stay in the same post in the same city for more than a few years. I agree that it's bad for research and bad for research workers, but point out that it's hard for us to complain too vociferously in case we prejudice our slim chances of further employment. "People ought to know what it's like," she says, pale and shocked. Used to this reaction I give her hot sweet tea and help her downstairs.

The incident causes afternoon tea-break to degenerate into a displeasing session of moaning. My fellow research-workers are in the same tenuous—that is, tenureless—position. We exchange gloomy predictions of hopeless futures and return to the labs feeling old and insecure. None of us is much over 30.

I leave in good time to have ten at home and get off to my evening class. I teach a technology course to Open University students. I enjoy it very much, but would I do it on top of a very tiring job, if it did not look good on application forms? But my cynicism runs away with me.

Thursday

My daily view from the bedroom window reveals that some of those slates are missing from the terrace opposite. Paper bags and broken branches whip across the roofs at lightning speed. I set off on foot early. It is slow progress against force 10 gales.

I collect my cells from the tissue-culture lab. Five hundred million of a sensitive clone of a human leukaemic cell-line. Ironically, these cancer cells are hard to keep alive in vitro. Carefully nurtured to a viability of 95 per cent in sterile conditions, I take them away to smash them to pieces.

I want to be sure of getting my coffee-break this morning. It is Thursday and that means *New Scientist*. *New Scientist* means new jobs, or at least that is what we will all be thinking. Over the morning brew we read out the situations vacant. But we never hear of that job we all want. The job we would travel to the end of the earth to take up. The job we would even live in London to take up. The research post with tenure.

The ritual reading is over quickly and I return to my main problem. Why are some cancer cells hormone-sensitive and some resistant? Are hormone receptors involved, or is this a red herring? Is it a nuclear effect or will this lead to another dead-end? Is what I see in my print-out or under the microscope real or an artifact?

In some grotesque way, research really is addictive. Oh, it's not the nobility of cancer research. That sort of romance doesn't exist—the halo wears heavy after only a few days. I suppose we must all be born optimists.

Friday

I scrape the frost off the inside of the bedroom window and peer at the tiles opposite heaving under their thick weight of snow. Definitely a day for wellies.

I work in a large old terraced house, converted into well-equipped labs. The sterilizing autoclave is in the cellar, the centrifuges in the back room, the ice-maker add cell-store in the old scullery. Upstairs, the office we all share, the sterile rooms, and the tissue culture lab. The tiny tea-room is in the attic. My hike shed in the old outhouse.

"You can keep your modern, soulless, purpose-built 'labs'", we say with rather too much conviction when the Surveyor of the Fabric has tentatively assured us that the old floor boards won't fall through under the weight of a new piece of equipment. "It's much cosier like this", we say with bravado as the fire officer explains the procedure for descending one by one by sling from the small attic window on to the cobbled back lane below.

But, really, the Victorian building doesn't bother me. Actually, I do prefer it. It's the Victorian attitudes that get to me. The mill-owner ethic of using workers according to convenience, without taking responsibility for them as people. No career, no security, always moving from job to job. And the detrimental, wasteful effect on the research itself by losing people with specialist experience.

My next job will see me building up again techniques and knowledge in a different area. Who benefits?

I'm the last to leave for the weekend, so I turn off all the lights and lock the door behind me.

Liza Soame

The author is a research assistant in a northern university.

Laurie Taylor

"*London Weekend*, Professor Lapping. Shall I put them through?" "I'r . . . what was that Janet?"

Nice to make her say it once more. *London Weekend*. So smart and efficient sounding. Actually, when you came to think about it most television stations did have such exciting names. *Anglia. Tyne-Tees. Granada.* Unambiguous. Modern. So much more, well, with-it, than crusty old publishers like *George Allen and Unwin* and *Routledge and Kegan Paul.*

.." *London Weekend*, Professor Lapping. Jason Chiltock." Jason Chiltock. Excellent. He'd had a slight suspicion recently that he was being fobbed off with one or other of the 47 researchers who worked in the LWT academic affairs section. But Jason was the real thing: executive associate director of the fortnightly investigative programme *Hard Probe*, only 191 years old but already with a lower second in comparative ethics from Kent and widely tipped to move up to acting deputy programme director once the present series of programmes was "in the can".

"Gordon . . . you old fart" (Imagine anyone from Meltham being so refreshingly unstuffy!) "Jeeezus . . . we had a night last night. You should have been there. I must have got through four bottles of red before we even put our noses into Blanche's. Then a couple of Hires in there. Three grappas. Then absolutely rotten into the Zanzibar. Three hours sleep then straight into the autumn schedule meeting."

"Good Heaveos", adonled Lapping. "Actually I got pretty smashed myself last night. Completely passed out in front of the television. Don't remember a thing. Head like a steam-hammer this morning."

"Anyway Gordon . . . pretty good news. They're keen on the general idea. But the title's out. Thought it might be Mike Baxtrow . . . you know he's OMD of the GV section and will probably be moving up to deputy associate on local proggs in the next reshuffle.

"Well he said 'Stuff *Aspects of Linguistics*; it sounds like a first year course at some second-rate poly'. No offence meant. So most of us went for *Where D'ya Get That Accent?* Like it?"

"Oh yes: much better. Nearly captures the colloquial slant of the progg."

"Good: that was the first thing. Secondly, they didn't like the idea of you as the presenter sitting at a desk with reference books. Everyone had a look at the pilot and felt it's good as you were, and everyone thought you were a natural, that it was best to go for a professional here. You know, popular face who'll get everyone interested from the start.

"So that's Nicholas Parsons . . . if he agrees . . . and you'll come into it more as a sort of exper tum. We thought of the idea of putting you into a sort of sound-proof glass-box with 'Professor' written over the door, and then at certain moments in the programme when one of the contestants . . . Oh God, sorry, forgot to mention the idea of contestants . . . anyway when the contestants can't answer and nonne has played their Trump Cabbage, you know like the Joker in *Knockout*, then a gong sounds and Nickers says 'Right-o. Let's ask the Prof'. Your phone rings in the sound-proof box and you give the answer.

"If you get it right then all the lights flash and we play a few bars of *Three Little Words*, if not . . . and that isn't fixed but I don't think anyone's done it before, although someone said they'd seen something like it in the States . . . there'll be a bonus from Nickers of 'Drawn the Prof' and then your seat will give way and you'll drop into what really is a pretty small pool of water . . ."

LETTERS TO THE EDITOR

Researchers' access to public records

Sir,—The article by Professor Donald Watt (February 1) on government and information appears at an opportune moment, and you may like to know progress of the inquiry which the Lord Chancellor set up under my chairmanship concerning the selection and access to official records.

At the end of this letter I set out our Terms of Reference, which we have felt bound to interpret broadly: the members of the committee are Professor Margaret Gowing, Professor of the History of Science at Oxford, and Sir Paul Osmond, Secretary to the Church Commissioners. The Secretary is Mr Graham Aylett, seconded from the Department of Education and Science.

Last year we visited the Public Record Office and major government departments to see their record operations at first hand, and we remain in close touch with them. Our written inquiries have comprehensively covered the rest of the bodies generating public records. We have received helpful evidence, both written and oral, from a wide range of researchers and users of public records, among whom, I am happy to say, were Professor Watt himself and the two bodies, the SSRC and the British Academy, whose interests he specially identified.

Our work is now to distil all that we have learned, to complete the examination and discussion of the points which arise, and to formulate recommendations to the Government. There is however just time for any of those with cogent points which they have not yet put to us to send them to the secretary of the committee at 34 Parliament Street, London SW1A 2NA. It was of course unfortunate that our target date for evidence last year was during the great *Times* silence, and I can assure you that we will do our best to take full account of any late views we now receive.

Terms of Reference

To review the arrangements for giving effect to those provisions of the Public Records Act 1958 and 1967 which relate to the selection of records for permanent preservation and to subsequent public access to them in the light of—

(1) The requirements of public business, of historical and other researchers, and of other users of public records generally, for an efficient records service;

(2) The volume of records generated by Government departments;

(3) technological changes in the format and storage of records; and

(4) the staff and accommodation costs of maintaining public records and the need for economy in the use of resources;

and to make recommendations.

Yours faithfully,
SIR DUNCAN WILSON,
Public Records Committee.

Sir,—Professor Watt's article on the release of official archive material for historical study units to mention two relevant points. The first is the fact that an unchecked amount of preliminary weeding takes place that can and does do serious harm to the value of particular files. Archive material is not simply deposited; it is, to use the current euphemism, "prepared". The second point is the existence and use of governmental discretion whereby the 30 year closure rule can be extended to 50 years and more.

It is understandable that public servants should now be nervous. Their position is vulnerable because they have persistently opted for, and been allowed, an administrative overkill.

Yours faithfully,
G. W. WHITMARSH,
Department of Education,
Warwick University.

Postage threat to publishing

Sir,—An important area of publishing, with a worldwide reputation and a key role in the dissemination of research and information in academic subjects, faces a certain future through the inefficiency and overmanning of the postal service. Faced with the recent round of postal increases and with further increases which could raise 1981 rates to a 100 per cent higher than 1979 rates and 100 per cent higher than 1979 surface rates, many journal members are contemplating drastic measures to reduce costs.

The consequences for the academic world of reductions in published restrictions on the number of pages, reduced frequency of publication, and even the disappearance of some key publications, are not pleasant. It is no exaggeration to say that the role in the international scholarly community will be seriously restricted.

Our postal system imposes an inequitable burden on the publication of learned societies. In many cases these publications are not fit from preferential rates for home and overseas. This month the overseas rate applying to books and periodicals has been increased on averages of 22 per cent, while other surface rates remained unchanged. There is no preferential inland rate for most academic publications (only the larger societies can take advantage of certain rates, and then only for a fraction of their larger circulation magazines). As a result, we have an incoherent system which results in a loss of revenue of nearly 50 per cent to the United Kingdom and United Kingdom postal rates.

We are obviously doing what we can to avoid future increases. We are well aware of the fact that there is no bottomless pit of funds in libraries, and that a vicious circle will start if prices rise too much. The problem is however a major one. In some cases distribution already accounts for 40 per cent of production costs, and the scope for absorbing swingeing increases is negligible.

May I appeal, on behalf of your members, for pressure to be brought on all academics to persuade the Post Office and the Government to consider the plight of learned society publications—particularly in view of the UPU "[illegible]" charge" which will badly hit our activities in 1981.

Yours faithfully,
MALCOLM CLARKE,
Chairman, Distribution Committee,
Association of Learned and Professional Society Publishers.

Suddaby and students

Sirs,—As president of the City of London Polytechnic Students Union I read with distress the article by Dr Suddaby, Provost of this institution (*THES*, January 25). As referred to in the article this polytechnic has seen disruption carried out by the Students' Union in protest over the 33 per cent rise in overseas students fees for this academic year, and the massive rises proposed for the next year.

Throughout last term and in the weeks of this term, Dr Suddaby has shown not only contempt for the aims of the student campaign but has also exacerbated the tensions in this college. His initial attitude in refusing to see myself or any elected student representative on this issue, prompted further disruption, and despite protestation that no present student's future at this polytechnic was in danger, one student has already had to leave.

Furthermore his article has inflamed popular opinion among the students so much that in all probability the union will once more resolve to occupy polytechnic premises.

The article has made it blatantly obvious that the resolution passed by both the Academic Council and the Court of Governors "that this (Council/Court) will continue to endeavour to obtain a change in this policy, and meanwhile within the limits of its resources will alleviate the hardship of overseas students requiring assistance" was to Dr Suddaby meaningless. While no one can deny his right to free speech, his article, as Provost of the City of London Polytechnic, will no doubt be taken by many people to be the official attitude of both staff, students and governors.

I would like to clear the record, and point out that not only do NUPE, NALGO and NATFHE, the Court of Governors and Academic Council oppose full cost fees, but also in the words of one head of department: "If the Provost thinks that full cost fees make sound economic sense then he should sack the whole of the law department, economics department and banking department, because they don't agree with him".

Yours faithfully,
ANNE DAVIES,
President,
City of London Polytechnic Students' Union.

Business studies

Sir,—I do not understand how Dr Hyman, in his article "Business Studies—or the study of Business", January 25, arrived at the conclusion that: "The great expectations of London and Manchester Business Schools has (sic) produced a grand retreat into academic respectability through subject specialisation" unless it was by the following process of false reasoning from faulty facts.

1. London and Manchester Business Schools are attached to universities
2. Universities are thought to be concerned with academic respectability and subject specialisation
3. Therefore London Business School and Manchester Business School must be similarly concerned
4. From which it must be concluded that they are both retreating from the real world of business, and therefore unfit to stand comparison with the world of polytechnics and their experience with practical matters.

It does not follow that attachment to a university necessarily breeds academic respectability and subject specialisation; Manchester has never had subject departments, but values academic respectability in that sense of the term which includes rigorous and relevant research and teaching. Nor is it inevitable that university connexions discourage close working with business and other organizations. Manchester teaches by live projects and encourages its staff to get out and work with managers on the job in a number of modes; research, consultancy and joint development activities, for example.

As for the helpful study of business from a multi-disciplinary standpoint, a dip into the publications of MBS and LBS will show their close involvement.

None of this is intended to be critical of any other centres of education and training for management, but intended to set things straight.

I hope the present financial pinch is not going to start fruitless competition between the further education sectors in management education, especially since colleagues from both sectors can, and do, work successfully together and with colleagues in management—as, for example, in the Association of Teachers of Management. If we are to refer to each other, it behoves us to think straight and get our facts right—like good academics!

Yours faithfully,
PROFESSOR TOM LUPTON,
Director,
Manchester Business School.

Right's reply

Sir,—Mr Seldon (January 25) says that the rights . . . do not apply to their pens to write to *The Times* or appear on television". We don't get invited to appear on television, and when we do spring to our pens our letters are not usually published, and all this is for the very reasons that Mr Seldon so forcefully describes in his article. It may be that the ground for this is that rights are not members of the dominant ruling cliques which prevail in the mass media and paperback worlds.

As for his suggestion that emphasizing engineering, marketing and management education would somehow achieve deterrification, those areas do not, and I mean especially engineering, provide the kind of vociferous graduate that could bring such a process about.

Yours faithfully,
MAURICE NORTH,
Professor of Social Institutions,
Preston Polytechnic.

Darwinism

Sir,—John Durant says at the end of his review of several books on Darwinism (January 25) that, after the general acceptance of evolution by natural selection, "the theologians held on to a Christian view of nature as continually dependent upon divine will, whereas Darwin and Huxley were agnostics". Darwin and Huxley were certainly agnostic, in the sense invented by Huxley himself in 1869, about such metaphysical concepts as the existence of God. But they were surely not agnostic, in any sense, about such empirical concepts as a divine will continually operating in nature; indeed Darwin implicitly and Huxley explicitly played a leading part in the process of excluding this concept from biology as completely as it had been excluded from cosmology. The essential distinction is that the theism/atheism issue is one, but the super-naturalism/naturalism issue is susceptible to scientific investigation rather than philosophical speculation, so that agnosticism in the former does not involve agnosticism in the latter.

NICOLAS WALTER,
Rationalist Press Association.

English Masters

Sir,—May I say how heartily I endorse A. S. Byatt's diagnosis of the state of affairs in graduate studies in English and her suggestions for remedy ("Pros and cons of mastering English", *THES*, February 1)? It is the sort of thing I have been saying for years, but A. S. Byatt puts it more forcibly. I hope her article will be widely read and pondered.

There is just one point in addition. Before her scheme for a new kind of MA, instead of the PhD, could become effective, it would be necessary for Oxford and Cambridge to abandon their anachronistic and unjustifiable custom of awarding the MA degree on the strength of a BA examination.

Yours truly,
PROFESSOR L. C. KNIGHTS,
57 Jesus Lane,
Cambridge.

Need of technicians

Sir,—I was very interested to read Charlotte Barry's report, (February 1) of Mr James Prior's remarks at a press conference for new Open University graduates.

Of particular interest was Mr Prior's reminder that an Open education, with the help of distance learning techniques, might be able to augment the supply of technicians needed by industry.

It may be worth noting in this context that this society, in association with the Technician Education Council and other interested bodies, is organising a conference on Distance Learning for Technicians.

This is being held at the end of March at the University of Surrey, with the very aim expressed by the Employment Secretary in your report.

Yours sincerely,
A. J. KENWARD,
Secretary, Society of Electronic and Radio Technicians.

Miller of Holloway

Sir,—Once again (*THES*, February 1) you have given a great deal of space to Terence Miller. Surely enough said the tale he recounts of a giant intellect just another bumbling mediocrity. Nothing wrong with good sight and holding on imaginative.

The Miller of Holloway told other's tale his own story. A different tale might have been that of a not so gigantic intellect, with passion for provoking and seeking sensitive confrontation.

Yours sincerely,
BERNARD ALEXANDER,
City of London Polytechnic.

Letters for publication should arrive on Tuesday morning at the latest. They should be as short as possible and the editor reserves the right to cut or amend them.

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The case for a national body

It is difficult to imagine that the present mess in the non-university sector of higher education can be sorted out without the creation of some kind of national body for polytechnics and colleges. But this conclusion, far from settling the matter as too many people in local authorities, institutions (and even the Department of Education and Science?) seem fondly to believe, raises a large number of awkward questions.

Most people sadly appear either to be unaware of this and blithely believe that the very existence of a national body will solve everything, or myopically ask the wrong questions such as whether the CDP or NATFHE should have more or fewer representatives, what the precise formula for the allocation of money to institutions should be, and so on. Too few people seem to be bothering to ask the really important questions: why do we need a national body in the first place? And what should its role and function be?

The first question is easier to answer than the second. There is a great deal of common ground about what is wrong with the old system of managing the non-university sector through an open-ended advanced further education "pool" and an arbitrary course approval system. The "pool" did not control the total resources available to institutions at all effectively—it certainly did not discriminate in a sensible way between them—but because it was embroiled in the annual budgeting of local government the "pool" inhibited forward planning. No financial discipline, and no planning horizons—a formidable combination of folly.

In a similar way the creaking course approval system combines the maximum of annoyance to polytechnics and colleges with the minimum of positive control over the direction of the non-university sector. It is badly synchronized with the parallel pooling mechanism. It imposes petty restrictions according to almost mechanical criteria derived from the experience of further education which are often quite inappropriate to higher education institutions. Yet it fails to subject the non-university sector to the "social control" which Mr Crosland saw as one of its characteristic virtues.

There is much less common ground about what should be done. Under the previous Government the preferred solution was that proposed by the Oakes committee, the creation of a national body, on which the local authorities would be heavily represented, with detailed executive functions, while individual local authorities would be left with a powerful blocking—some would say, spoiling—function through their continued control of a crucial margin of expenditure. This Oakes solution eventually attracted a grudging consensus in its favour.

Under the present Government the Oakes approach has been scrapped. In its place have been put desperate and threadbare expedients: "capping the pool" which means fixing a total for poolable expenditure in spite of the fact that no satisfactory mechanism for allocation, let alone discrimination, between institutions has been found; and the "broad steer", the new euphemism for manpower planning, exercised through a strengthened but sadly unreformed course approval system. But Oakes, like Banquo's ghost, continues to haunt Mr Carlisle and Dr Boyson. The local authorities remain Oakes enthusiasts and the institutions like the idea of a national body much more than the prospect of the regional staff inspectorate with a retread.

So it is reasonably safe to predict that within three to five years some kind of national body will be created for the non-university sector of higher education. But this raises the second and more intractable question: what should the role and function of such a body be? This in turn raises a subsidiary but perhaps even more controversial question: should the universities and the University Grants Committee be involved in this reform of the non-university sector, and if so how?

The trouble with both the Oakes proposals and present policies for polytechnics and colleges is that they concentrate too much on detailed problems and too little on broad policy. Yet it is the latter not the former that the real vacuum exists. These detailed problems can be solved, most probably along the lines being followed by the present DES working group which is trying to devise cost norms for particular subjects. They can almost certainly be solved by a reform of the administration of the present "pool" as easily as by the creation of new institutions.

What cannot be done in informal and impermanent working groups is to argue about and decide the broad direction the non-university sector (and the universities?) should follow over the next decade. Yet this is the more important task. Far too much attention is being paid to essentially secondary questions of how to allocate resources sensibly and fairly, while far too little attention is being paid to devising the Oakes guidelines that would inform this process of allocation.

The real job of a national body should be a strategic not an executive one. The detailed job of allocation can be left to the DES and to local authorities (and, of course, individual institutions). Indeed it is better if the strategic and the allocative roles are not muddled up. A national body should concentrate on the wood not on the trees. It should be seen not as the policeman of the "pool", but as the driver who steers the system.

Such a body would not decide policy—that would always remain the prerogative of politicians. But it could help to generate more sophisticated alternative policies (as the conduit of higher education opinion and as the educator of politicians), and be the Government's instrument for implementing in broad outline his chosen policy.

If any national body had a strategic rather than an allocative role, its relationship with the university sector would assume much greater importance. Clearly many of the issues with which it would have to deal would stray across the binary line. Indeed there may even be a case for establishing a national body—a council for higher education—which would cover all higher education. This would answer those critics who suggest that the UGC has been crowded out of Whitehall policy-making by the PESC system, but at the same time be no threat to the autonomy of the universities because the UGC would continue to be solely responsible for the detailed distribution of the university grant. Perhaps, although this seems less likely, the UGC itself could take on this wider role. There are many international precedents—a soft version in Sweden, a hard one in Australia.

At the very least, it is important to free debate about the need for a national body for non university higher education from the narrow perspective of the Oakes committee

A sense of social responsibility

Higher education cannot and should not seek to exist in a vacuum, so an international exchange of ideas on relationships with the community at large should provide a much-needed fillip in an important area. With participation rates falling throughout the western world, the "ivory tower" image is one which academic institutions can no longer afford.

However, last week's international education conference in Paris revealed some potentially dangerous trends as well as providing interesting comparisons between the attitudes surrounding higher education in Britain and elsewhere.

Although little recent data were available on public attitudes to higher education in Britain, it was clearly possible to achieve a greater rapport with the local community than most institutions enjoy in this country. It would be surprising if, first, there is not a much higher percentage of the population of any British university city considers that the university caters well for the enhancement of local culture and contributes significantly to education at other levels.

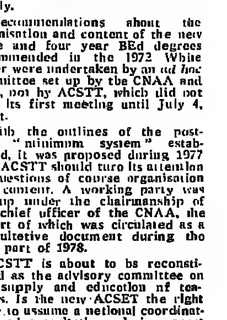
Yet in Hiroshima, although only 7 per cent thought their university did badly on these counts, academics worry that a greater proportion is not fully satisfied. This is in spite of the fact that 84 per cent of local residents are interested in the university and even more would like to send their children there.

However, it would be wrong to assume, as many did in Paris, that the absence of such a response in other parts of the world denotes a sudden crisis in the relationship of higher education with the wider community. A continuing reappraisal of institutions' roles is to be applauded but there is an obvious danger of over-reaction.

More sober voices warned against neglecting the primary functions of an academic institution in an obsession with community service. Too complete a swing towards applied research at the expense of pure research, for example, ignores the fact that the latter has provided the basis of many scientific advances subsequently adapted to improve the quality of life.

Provided it maintains a sense of social responsibility, a lively academic institution should always be of value to the community it serves. To dilute its concentration on teaching and research in pursuit of ill defined ambitions would not be of benefit ultimately either to its students or to the surrounding area. More contact with the local community through increased awareness of the work of higher education and more open access to its facilities would go a long way towards improving the town/gown relationship. But institutions should not be panicked into establishing grandiose schemes at the expense of their traditional concerns because to do so would be to lay the foundations for even more serious problems in the future.

A touch of professional rethinking



William Taylor

No-one would believe it from the headlines, but professional teacher education is still alive and (fairly) well and living on in 28 universities and a much larger number of polytechnics and other public sector colleges.

New teachers are still receiving their degrees and certificates and finding jobs in schools. The subject education continues to engage the attention and provide the bread and butter of a substantial body of lecturers and tutors. And there are still quasi-governmental and non-governmental, professional and independent groups concerned with the whole business of how teachers are recruited, selected, educated, trained, inducted, deployed, refreshed, developed, rewarded, promoted and prepared for retirement.

Too many organizations? Probably. Do we need any more? Yes, at least one. The explanation, which is unlikely to appeal to sufferers from acronymphobia, involves a bit of history.

During the period up to the 1972 White Paper the monotechnic nature of nearly all teacher education institutions and their grouping (with certain exceptions) in university-based area training organizations meant that the organization of discussion and consultation about teacher education courses and content was relatively straightforward.

Developments over the past eight years have radically changed this picture. The disappearance of teacher education as an identifiable sector of higher education, the dissolution of the area training organizations, the diversification of institutions and courses, the management of new associations, the priority for in-service education, have all altered the basis of professional discussion and consultation.

At regional level, the former ATOs provided a framework for the consideration of teachers, and of provides and validators, would be concerned not with pool-capping and Crombleiving and the other esoteric logistical arts, but with an agenda of professional issues that is already long. What should be the balance between professional and subject elements in concurrent courses? What are the disciplines and elements that enter into useful two-year/three-year/four-year professional course and how should they be related one to another? How can school experience be linked with work in lecture and seminar room and library to constitute a more effective preparation for life in classrooms? What are the implications for teacher educators of recent curricula effusions from Elizabeth House? Is there a core curriculum for teacher education?

In the longer run, other matters might concern a JCET. Would it be possible to advise Professional Committees on the *desiderata* that any teacher preparation programme worthy of the name should embody as a condition of recognition as a qualified teacher? Could we by this route circumvent the existing log jam in progress towards a teachers' general council?

But five things first. An approving nod for the setting up of a JCET from the first meeting of ACSET would certainly help things along.

suspect, not very effective pattern of liaison committees has grown up between them. Most of them achieved representation on the former Advisory Committee on the Supply and Training of Teachers (ACSTT), but between 1973 and 1978, when it ceased to meet, ACSTT was almost entirely concerned with questions of numbers and teacher supply.

(Recommendations about the organization and content of the new three and four year BEd degrees recommended in the 1972 White Paper were undertaken by an *ad hoc* committee set up by the CNAA and UGC, not by ACSTT, which did not hold its first meeting until July 4, 1973).

With the outlines of the post-1981 "minimum system" established, it was proposed during 1977 that ACSTT should turn its attention to questions of course organisation and content. A working party was set up under the chairmanship of the chief officer of the CNAA, the report of which was circulated as a consultative document during the first part of 1978.

ACSTT is about to be reconstituted as the advisory committee on the supply and education of teachers. In the new ACSET the right body to assume a national coordinating and consultative role in respect of the organization and content of teacher education?

Those who believe that ACSET should be the chosen instrument argue that the basis of representation on the committee is established and does not give rise to controversy; it is serviced by the DES and imposes no financial burden for the organizations and individuals involved; there is face-to-face contact with Departmental officials and access to Ministers, and as ACSTT, the committee evolved a generally satisfactory pattern of sub-groups and style of working.

This conclusion does not command universal assent. For some, the ACSET will be wrongly constituted for the purpose of discussing professional issues. In particular, the strong representation of local authorities and other maintaining bodies, however appropriate it may be for considering questions of supply and organization, does not best serve the professional task of developing the content of teacher education and training.

By its nature, the committee cannot readily draw upon the specialist knowledge and information that is available within universities, polytechnics and other institutions, or claim independence from departmental service and support.

Those who take this view, and who look for an alternative solution to problems of consultation and coordination, favour the establishment of some kind of umbrella professional organization for teacher education, within which all the providers in the field could make a contribution. They also see it as something which would act as a single point of reference for the main authorities associations, for ACSET and for the secretary of state on issues relating to the content of teacher education programmes and the structure of professional awards.

Such a joint council for the education of teachers, as a body of providers and validators, would be concerned not with pool-capping and Crombleiving and the other esoteric logistical arts, but with an agenda of professional issues that is already long. What should be the balance between professional and subject elements in concurrent courses? What are the disciplines and elements that enter into useful two-year/three-year/four-year professional course and how should they be related one to another? How can school experience be linked with work in lecture and seminar room and library to constitute a more effective preparation for life in classrooms? What are the implications for teacher educators of recent curricula effusions from Elizabeth House? Is there a core curriculum for teacher education?

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